314 CMR 5.00: GROUND WATER DISCHARGE PERMIT PROGRAM

Section

- 5.01: Purpose, Authority and Scope
- 5.02: Definitions
- 5.03: Discharges Requiring a Permit
- 5.04: Other Activities Requiring a Permit
- 5.05: Activities Not Requiring a Permit
- 5.06: Restrictions on the Issuance of a Permit
- 5.07: Effect of a Permit
- 5.08: Continuation of an Expiring Permit
- 5.09: Duty to Submit Hydrogeological Evaluation
- 5.09A: Application for a Permit
- 5.10: Permit Conditions
- 5.11: Ground Water Standards
- 5.12: Modification, Suspension, Revocation, Renewal, and Transfer of Permits
- 5.13: General Permits
- 5.14: Signatories to Permit Applications, Notices of Intent, and Reports
- 5.15: Requirements for Privately Owned Wastewater Treatment Facilities
- 5.16: General Conditions

5.01: Purpose, Authority and Scope

314 CMR 5.00 establishes the program whereby discharges of pollutants to the ground waters of the Commonwealth are regulated by the Department pursuant to M.G.L. c. 21, §§ 27 and 43. In addition to regulating these discharges, M.G.L. c. 21, §§ 26 through 53 requires that the Department regulate the outlets for such discharges and any treatment works associated with these discharges. Through 314 CMR 5.00, the Department controls the discharge of pollutants to the ground waters of the Commonwealth to assure that ground waters are protected for their actual and potential use as a source of potable water and surface waters are protected for their existing and designated uses and to assure the attainment and maintenance of the Massachusetts Surface Water Quality Standards set forth in 314 CMR 4.00.

5.02: Definitions

As used in 314 CMR 5.00, the following words have the following meaning:

<u>Aquifer-a Geological Formation</u> - group of formations or part of a formation that is capable of yielding a significant amount of water to a well or spring.

<u>Best Management Practices or BMP</u> - schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the Commonwealth. BMPs include treatment requirements, operating procedures, structures, devices and/or practices to control plant site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage.

<u>Biological Monitoring</u> - any test which includes the use of aquatic algal, bacterial, invertebrate, or vertebrate species to measure acute or chronic toxicity, and any biological or chemical measure of bioaccumulation.

<u>Boiler Blowdown</u> - wastewater that results from the periodic or continuous bleed off of water from a boiler during operation for the purpose of eliminating excess solids from the boiler water and that may include steam condensate from boiler operations. For purposes of 314 CMR 5.00, the term boiler blowdown does not include the wastewater and waste alkaline cleaning solution generated by the use of acidic cleaning solutions to remove scale or other contaminants from a boiler or the hot alkaline cleaning solution used to remove oil and grease, protective coatings or soil from a new boiler operation.

Bypass - the diversion of wastes from any portion of a treatment works.

5.02: continued

Commissioner - the Commissioner of the Department.

<u>Contact Cooling Water</u> - water used to reduce temperature which comes into contact with a raw material, intermediate product, waste product (other than heat), or finished product.

<u>Department</u> - the Massachusetts Department of Environmental Protection.

<u>Discharge or Discharge of Pollutants</u> - any addition of any pollutant or combination of pollutants to waters of the Commonwealth from any source.

Effluent - a discharge of pollutants into the environment, whether or not treated.

<u>Effluent Limitation or Effluent Limit</u> - any requirement, restriction, or standard imposed by the Department on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the Commonwealth, to publicly or privately owned treatment works or to a reclaimed water distribution system so that the effluent may be beneficially reused as reclaimed water in accordance with 314 CMR 20.00.

Effluent Limitation Guideline or Effluent Standard - a regulation published by the EPA Administrator under The Federal Act § 304, 306, or 307, 33 U.S.C. § 1314, 1316, or 1317, or by the Department under M.G.L. c. 21, § 27 which is used as a basis for establishing effluent limitations.

<u>Enhanced Secondary Treatment</u> - secondary treatment that includes disinfection to ensure that the effluent is capable of meeting an effluent limitation of no more than 200 fecal coliform organisms per 100 ml and additional processes capable of meeting an effluent limitation of 10 mg/l of nitrate nitrogen and total nitrogen.

Environmental Protection Agency or EPA - the United States Environmental Protection Agency.

<u>Facility or Facilities</u> - any and all devices, processes, and properties real or personal used in the collection, pumping, transmission, storage, treatment, disposal, recycling, reclamation or reuse of water-borne pollutants, but not including any works receiving a hazardous waste from off the site of the works for the purpose of treatment, storage or disposal, or any works for the distribution or use of reclaimed water in accordance with 314 CMR 20.00 and a Service and Use Agreement approved by the Department that are not located on the same site as the devices and processes used for wastewater treatment and are not under the direct ownership or control of the permittee.

<u>Federal Act</u> - the Federal Water Pollution Control Act (FWPCA), currently known as the Clean Water Act, 33 U.S.C. § 1251 *et seq*.

<u>Filtered Water</u> - an oxidized, coagulated wastewater which has been passed through filter media so that the turbidity as determined by an approved laboratory method does not exceed an operating turbidity of two nephelometric turbidity units (NTU) in any 24-hour period, nor exceed five NTU more than 5% of the time, and does not exceed ten NTU at any time.

<u>Ground Source Heat Pump (GSHP) Well</u> - an excavation by any method for the purpose of transferring heat to or from the earth for heating and/or cooling purposes in which the ambient ground temperature is 90° F or less.

<u>Ground Water</u> - water below the land surface in a saturated zone, including perched ground water.

<u>Ground Water Travel Time</u> or <u>Ground Water Time of Travel</u> - the time it takes a particle of water to flow through an aquifer from one point to another point of lower hydraulic gradient.

<u>Hazardous Substance</u> - any of the substances designated under 40 CFR Part 116 pursuant to § 311 of the Federal Act, 33 U.S.C. § 1321, or any hazardous material as defined in M.G.L. c. 21E.

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<u>Hazardous Waste</u> - a hazardous waste pursuant to 310 CMR 30.000: *Hazardous Waste*.

<u>Health Advisory</u> - the level of a pollutant in water at which, with a margin of safety, adverse health effects would not be anticipated, as determined by the Department or EPA.

Indirect Discharger - a discharger introducing pollutants to a treatment works.

<u>Industrial Waste</u> - any liquid, gaseous, or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade, or business or from the development or recovery of any natural resources.

<u>Industrial Wastewater</u> - waste in liquid form resulting from any process of industry, trade or business, regardless of volume or pollutant content. For purposes of 314 CMR 5.00, industrial wastewater includes, but is not limited to, wastewater from the activities under the Standard Industrial Classification Codes listed in 310 CMR 15.004(5). Notwithstanding the foregoing, wastewater consisting only of sewage is not industrial wastewater.

<u>Infiltration/Inflow (I/I)</u> - extraneous flow that enters a sewer system through a variety of defects and illegal connections.

<u>Infiltration</u> - water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through means which include, but are not limited to, defective pipes, pipe joints, connections or manholes. Infiltration does not include and is distinguished from inflow.

<u>Inflow</u> - water other than sanitary flow that enters a sewer system (including sewer service connections) from sources which include, but are not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, connections between storm and sanitary sewers, catch basins, cooling towers, stormwater, surface runoff or street drainage. Inflow does not include and is distinguished from infiltration.

Interim Wellhead Protection Area or IWPA - an Interim Wellhead Protection Area as defined in 310 CMR 22.02. Generally, this is ½ mile radius from the well or wellfield for sources with an approved pumping rate of 100,000 gallons per day or greater. For smaller sources, the radius in feet is determined by multiplying the approved pumping rate in gallons per minute by 32 and adding 400.

<u>Leachate</u> - any liquid, including any suspended or dissolved components in the liquid, that has percolated through or drained from a landfill or other solid waste disposal site.

<u>Local Government Unit</u> - a town, city, district, commission, agency, authority, board or other instrumentality of the Commonwealth or any of its political subdivisions including a regional government unit.

<u>Massachusetts Surface Water Quality Standards</u> - 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*.

<u>Milligrams Per Liter-or mg/l</u> - the weight in milligrams of any specific substance or substances contained in one liter of solution.

Monitoring Well - a well that is specifically designed, constructed, emplaced, and located to measure the impact of a discharge of pollutants upon ground water quality and quantity.

<u>Natural Background Conditions</u> - the chemical, physical or biological characteristics of surface or ground waters unaltered by human activity.

<u>Nephelometric Turbidity Unit (NTU)</u> - measurement of turbidity as measured by the ratio of the intensity of light scattered by a sample to the intensity of incident light as measured by method 2130B in the most recent edition of "Standard Methods for the Examination of Water and Wastewater".

5.02: continued

<u>Nitrogen Sensitive Area</u> - an area of land and/or natural resource area so designated by the Department in accordance with 310 CMR 15.215.

<u>Non-contact Cooling Water</u> - uncontaminated water used to reduce temperature which does not come into direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

On-site Subsurface Sewage Disposal System - a system or series of systems for the treatment or disposal of sanitary sewage below the ground as defined in 310 CMR 15.002.

<u>Open Sand Bed</u> - a system for the disposal of wastewater in which effluent is spread onto a sand media so that it may percolate through that media prior to discharge through the soil and the unsaturated zone to the ground water.

<u>Other Wastes</u> - all liquid discarded matter other than sewage or industrial waste which may cause or contribute to a violation of the Massachusetts Surface Water Quality Standards or interfere with the use of the ground water as an actual or potential source of potable water.

<u>Outlet</u> - the terminus of a sewer system, or the point of emergence of any water-borne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the Commonwealth or on the land surface.

<u>Permit</u> - an authorization issued pursuant to M.G.L. c. 21, § 43 and 314 CMR 2.00, and 3.00, 5.00, 7.00, or 20.00 to implement the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53, the Federal Act, 33 U.S.C. §§ 1251 *et seq.*, and the NPDES regulations, 40 CFR Part 122. Depending on the context in 314 CMR 5.00, the term "permit" applies to:

- (a) an individual permit that regulates one or more discharges by a discharger; and/or
- (b) a general permit that regulates one or more categories of discharges and covers multiple dischargers who have properly applied for and obtained coverage under the general permit.

<u>Person</u> - any agency or political subdivision of the Commonwealth, the Federal government, any public or private corporation or authority, individual, partnership or association, or other entity, including any officer of a public or private agency or organization, upon whom a duty may be imposed by or pursuant to any provisions of M.G.L. c. 21, § 26 through 53.

<u>Point Source</u> - any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft from which pollutants are or may be discharged. <u>Point Source</u> does not include return flows from irrigated agriculture.

<u>Pollutant</u> - any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter, in whatever form and whether originating at a point or non-point source, which is or may be discharged, drained or otherwise introduced into any sewer system, treatment works or waters of the Commonwealth.

<u>Pollution</u> - the presence in the environment of pollutants in quantities or characteristics which are or may be injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property throughout such areas as may be affected.

<u>Potable Water</u> - water from any source that has been approved by the Department for human consumption as defined in 310 CMR 22.02.

Potentially Productive Aquifer.

- (a) all aquifers delineated by the U.S. Geological Survey (USGS) as a high or medium yield aquifer; and
- (b) all aquifers located east of the Cape Cod Canal (Cape Cod), on the Elizabeth Islands, on Martha's Vineyard, or on Nantucket.

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<u>Pretreatment</u> - the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutants' properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW or PWTF.

<u>Primary Treatment</u> - the process or group of processes capable of removing from sewage a minimum of 25% of the five day biochemical oxygen demand, 55% of the suspended solids, and 85% of the floating and settleable solids.

<u>Privately Owned Wastewater Treatment Facility or PWTF</u> - any device or system owned by a private entity that is used for the treatment and disposal (including recycling and reclamation) of sewage and/or industrial wastewater. A Privately Owned Wastewater Treatment Facility includes the sewers, pipes, or other conveyances that convey the wastewater to the treatment facility.

<u>Private Water Supply Area</u> - an area that is served by private wells and where in the opinion of the Department it is not reasonable to connect to a public water system or where approval to connect to the public water system cannot be obtained.

<u>Publicly Owned Treatment Works or POTW</u> - any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a local government unit. A POTW includes any sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

<u>RCRA</u> - the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, 42 U.S.C. §§ 6901 through 6992k.

RCRA Facility - a hazardous waste management facility as defined in 314 CMR 8.03.

<u>Reclaimed Water</u> - wastewater that is treated so that it is suitable for beneficial reuse in accordance with 314 CMR 20.00.

<u>Reclaimed Water Distribution System</u> - a system that distributes reclaimed water so that it may be reused in accordance with 314 CMR 20.00.

<u>Reclaimed Water System</u> - a treatment works that includes a system for treating wastewater so that it may be beneficially reused in accordance with 314 CMR 20.00.

Reject Water from a Reverse Osmosis Facility - sidestream wastewater from reverse osmosis treatment units.

Residential Uses - apartment buildings, townhouses, condominiums, cooperatives, single-family and/or multi-family homes including manufactured homes, and rooming and boarding houses. Residential uses do not include the use of property for the activities listed in the following Standard Industrial Classification Codes: 7011, hotels; 7032, sporting and recreational camps; 7033, recreational vehicle parks and camp sites; 7041, organizational hotels and lodging on a membership basis; 8051 through 8059, nursing and personal care facilities; 8062 through 8069, hospitals; and 8361, residential care facilities.

<u>Satellite Reclaimed Water System</u> - a system for the distribution, use, sale or offering for use, sale or distribution of reclaimed water in accordance with 314 CMR 20.00 that does not include wastewater treatment.

<u>Saturated Zone</u> - any portion of the earth below the land surface where every available opening (pore, fissure, joint, or solution cavity) is filled with water.

<u>Seasonal Wastewater Treatment Facility</u> - a facility that discharges a liquid effluent as a result of the treatment of sewage only and that is in operation no more than six months of the year.

5.02: continued

<u>Secondary Treatment</u> - the process or group of processes capable of removing from untreated wastewater a minimum of 85% of the five day biochemical oxygen demand and suspended solids and virtually all floating and settleable solids followed by disinfection.

<u>Sewage</u> - the water-carried human or animal wastes from residences, buildings, industrial establishments or other places, together with such ground water infiltration and surface water as may be present.

<u>Sewer System</u> - pipelines or conduits, pumping stations, force mains, and all other structures, devices, appurtenances, and facilities used for collecting and conveying wastes to a site or works for treatment or disposal.

Stormwater - stormwater runoff, snowmelt runoff, surface runoff, and drainage.

<u>Total Dissolved Solids</u> - the total dissolved (filterable) solids as determined by the use of the method specified in 40 CFR Part 136 or other method approved by the Department

<u>Total Maximum Daily Load</u> - the sum of a receiving surface water's individual waste load allocations and load allocations and natural background which together with a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and surface water quality, represents the maximum amount of a pollutant that a surface water body can receive and still meet the Massachusetts Surface Water Quality Standards in all seasons.

<u>Total Organic Carbon</u> - the oxidizable organic carbon present in treated sewage as measured by a Massachusetts certified laboratory.

<u>Toxic Pollutants</u> - any pollutant or combination of pollutants including disease-causing agents, that are capable of producing an adverse effect in an organism or its offspring, including food chain effects according to information available to the Department. The effect may be the result of direct or indirect exposure and may injure structure, function, or cause death to the organism. These pollutants include, but are not limited to, those identified in 314 CMR 3.17.

<u>Treatment Works</u> - any and all devices, processes and properties, real or personal, used in the collection, pumping, transmission, storage, treatment, disposal, recycling, reclamation or reuse of water-borne pollutants, but not including any works receiving a hazardous waste from off the site of the works for the purpose of treatment, storage or disposal or any works for the distribution or use of reclaimed water in accordance with 314 CMR 20.00 and a Service and Use Agreement approved by the Department that are not located on the same site as the devices and processes used for wastewater treatment and are not under the direct ownership or control of the permittee.

<u>Uncontaminated Water</u> - water which does not contain dredge spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological waste materials, radioactive materials, wrecked or discarded equipment, cellar dirt, industrial, municipal or agricultural waste or any other pollutant which upon discharge could cause or contribute to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* or interfere with the actual or potential use of ground water as a source of potable water.

<u>Underground Source of Drinking Water</u> - an aquifer or any portion thereof which supplies a public water system or which contains a sufficient quantity of ground water to supply a public water system and either currently supplies drinking water for human consumption or contains less than 3000 mg/l total suspended solids. Every aquifer shall be presumed to be an underground source of drinking water unless otherwise determined by the Department in accordance with 314 CMR 5.10(9)(c).

<u>Unsaturated Zone</u> - that portion of the earth's crust which does not contain sufficient water to fill all interconnected voids or pore spaces. Perched water bodies may exist within the unsaturated zone.

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<u>Wastewater</u> - sewage, industrial waste, other wastes or any combination of the three. Water from the washing of vehicles, machinery, materials, products, equipment, and/or buildings with detergents or other cleaning agents that is part of the ordinary operations of a commercial or industrial enterprise or a local government unit is wastewater.

<u>Waters of the Commonwealth</u> - all waters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, ground waters, and vernal pools. Wetlands constructed for the sole purpose of stormwater management on or after January 2, 2008 are not waters of the Commonwealth. Wetlands constructed for the sole purpose of wastewater management and lined basins constructed for the sole purpose of storing reclaimed water so that it may be reused are not waters of the Commonwealth provided they are constructed on or after March 20, 2009.

 $\underline{\text{Well}}$ - a bored, drilled, or driven shaft or a dug hole, whose depth is greater than its largest surface dimension.

Zone A - the land between a surface water source and the upper boundary of the bank as defined in 310 CMR 22.02, to include the land within a 400 foot lateral distance from the upper boundary of a bank of a Class A surface water source as defined in 314 CMR 4.05(3)(a) and the land within a 200 foot lateral distance from the upper boundary of the bank of a tributary or associated surface water body.

Zone I - the protective radius around a public water supply well or wellfield as defined in 310 CMR 22.02. For public water supply systems with approved yields of 100,000 gallons per day (gpd) or greater, the protective radius is 400 feet. Tubular wellfields require a protective radius of 250 feet. The protective radii for all other public water system wells are determined by the following equation: Zone I radius in feet +[150x log of pumping rate in gpd] -350.

Zone II - the area of an aquifer that contributes water to a well under the most severe pumping and recharge conditions that can realistically be anticipated as defined in 310 CMR 22.02.

5.03: Discharges Requiring a Permit

- (1) No person shall discharge pollutants to ground waters of the Commonwealth without a currently valid permit from the Department pursuant to M.G.L. c. 21, § 43 and 314 CMR 5.00, except as otherwise provided in 314 CMR 5.05. No person shall construct, install, modify, operate or maintain an outlet for such a discharge or any treatment works required to treat such discharge without having first obtained a discharge permit in accordance with 314 CMR 5.03(1) and written approval from the Department for such activity, except as otherwise provided in 314 CMR 5.05. The Department may require any person to provide information to determine whether that person is subject to M.G.L. c. 21, §§ 26 through 53 and 314 CMR 5.00 or in violation of M.G.L. c. 21, §§ 26 through 53 or 314 CMR 5.00. Any person who discharges or proposes to discharge pollutants to ground waters of the Commonwealth may apply for an individual permit or request coverage under a general permit by filing the appropriate application forms and paying the applicable fees in accordance with 314 CMR 5.00 and 2.00 and 310 CMR 4.00.
- (2) Except as otherwise provided in 314 CMR 5.05, activities which constitute discharges of pollutants requiring a permit under 314 CMR 5.03(1) include, but are not limited to, the construction, installation, modification, operation or maintenance of the facilities listed in 314 CMR 5.03(2)(a) through (e):
 - (a) Any facility which discharges a liquid effluent onto or below the land surface;
 - (b) Any facility which discharges a liquid effluent to a percolation pit, pond, or lagoon;
 - (c) Any facility which discharges a liquid effluent via a soil absorption system, including but not limited to: leaching pits, galleries, chambers, trenches, fields, and pipes;
 - (d) Any facility which discharges a liquid effluent into a Class V injection well as defined in 310 CMR 27.00; or
 - (e) Any facility with an associated unlined pit, pond, lagoon, or surface impoundment in which wastewaters or sludges are collected, stored, treated, or disposed and from which a liquid portion seeps into the ground.

5.04: Other Activities Requiring a Permit

- (1) No person shall engage in any activity, in addition to those described in 314 CMR 5.03, which may reasonably be expected to result, directly or indirectly, in the discharge of pollutants into ground waters of the Commonwealth, without a currently valid permit from the Department, pursuant to 314 CMR 5.00 and 2.00, except as otherwise provided in 314 CMR 5.05. Any person who engages or proposes to engage in such activities may apply for an individual permit or request coverage under a general permit by filing the appropriate application forms and paying the applicable fees in accordance with 314 CMR 5.00 and 2.00 and 310 CMR 4.00.
- (2) Such other activities shall specifically include, but not be limited to:
 - (a) Storm Water Discharges to the ground as defined in Storm Water Discharges means a conveyance or system of conveyances (including pipes, conduits, ditches and channels) primarily used for collecting and conveying storm water runoff, but not including combined municipal sewer systems, and which:
 - Discharges storm water runoff contaminated by contact with process wastes, raw materials, toxic pollutants, hazardous substances, or oil and grease to a leaching facility, or percolation pit, pond, or lagoon; or
 - 2. Is designated under 314 CMR 5.04(2)(b).

Such discharges shall include, but not be limited to, any storm water discharge which is located in an industrial plant or in plant associated areas, if there is a potential for significant discharge of storm water contaminated by contact with process wastes, raw materials, toxic pollutants or hazardous substances. Plant associated areas means industrial plant yards, immediate access roads, drainage ponds, refuse piles, storage piles or areas, and material or product loading and unloading areas. The term excludes areas located on plant lands separated from the plant's industrial activities, such as office buildings and accompanying parking lots.

- (b) Case-by-case designation of storm water discharges to the ground. The Department may designate a conveyance or system of conveyances primarily used for collecting and conveying storm water runoff as a storm water discharge to the ground. This designation may be made when the Department determines that a storm water discharge is or may be a significant contributor of pollution to the ground waters of the Commonwealth. In making this determination, the Department shall consider the following factors:
 - 1. The location of the discharge with respect to ground waters of the Commonwealth;

 - 2. The size of the discharge;3. The quantity and nature of the pollutants reaching ground waters of the Common-wealth and the Massachusetts water quality standards applicable to such waters; and
 - 4. Other relevant factors.
- Any person owning, operating or maintaining a storm water discharge is subject to the requirements of 314 CMR 5.04(1).
- (4) Any person owning, operating or maintaining a conveyance or system of conveyances operated primarily for the purpose of collecting and conveying storm water runoff which does not constitute a storm water discharge is subject to the provisions of 314 CMR 5.05(8).

5.05: Activities Not Requiring a Permit

The following activities do not require a permit pursuant to M.G.L. c. 21, § 43 and 314 CMR 5.00:

The construction, installation, modification, operation and maintenance of a facility which discharges a liquid effluent as a result of the treatment of sewage at a treatment works which is designed to receive and receives less than 10,000 gallons per day, provided that such facility and treatment works are designed, approved, constructed and maintained in accordance with 310 CMR 15.000: The State Environmental Code, Title 5, Standard Requirements For the Siting, Construction, Inspection, Upgrade and Expansion of On-site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage.

- (b) The operation and maintenance of a facility which discharges a liquid effluent as a result of the treatment of sewage at a treatment works which: is designed to receive and receives 10,000 to 15,000 gallons per day, provided that the facility and treatment works were designed, approved, constructed and have been and are operated and maintained in accordance with Title 5 and its predecessor Codes, as applicable, and provided further that the facility is not located in a nitrogen sensitive area designated by the Department in accordance with 310 CMR 15.215 or the Zone A of a public water system.
- (c) As used in 314 CMR 5.05(1)(a) and (b), the word "maintained" includes, but is not limited to, upgraded, if upgrading is required by Title 5, 310 CMR 15.000: *Title 5*.
- (d) For purposes of determining whether the design, construction, operation or maintenance of a facility is an activity not requiring a permit as provided in 314 CMR 5.05(1)(a) and (b), the Department shall calculate the volume of sewage the treatment works is designed to receive and receives in accordance with all applicable provisions of Title 5, including without limitation, 310 CMR 15.006, 310 CMR 15.007, 310 CMR 15.010, and 310 CMR 15.203.
- (2) The construction, installation, modification, operation or maintenance of a recharge well used exclusively to replenish the water in an aquifer with uncontaminated water.
- (3) A discharge in compliance with the written instructions of an On-scene Coordinator pursuant to 33 CFR Part 153 Control of Pollution by Oil and Hazardous Substances, Discharge Removal and 40 CFR Part 300: Subchapter J Superfund, Emergency Planning, and Community Right-to-know Programs, Subparts B and C, or if conducted as an Immediate Response Action in compliance with M.G.L. c. 21E, 310 CMR 40.0000, or if approved in writing by the Department, as necessary to abate, prevent, or eliminate an imminent hazard to the public health, safety, welfare or the environment.
- (4) The construction, installation, modification, operation or maintenance of a salt-water intrusion barrier well used to inject uncontaminated water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water.
- (5) The construction, installation, modification, operation or maintenance of a ground source heat pump well that has applied for and been accepted for registration in accordance with the Underground Injection Control Regulations, 310 CMR 27.00 and the Department's Guidance Document for Ground Source Heat Pump Wells.
- (6) The construction, installation, modification, operation or maintenance of a facility used to discharge non-contact cooling waters provided the flow does not exceed 15,000 gallons per day and the temperature of the non-contact cooling water does not exceed 40°C, the discharge is not within 500 feet of a cold-water fishery, the facility is designed to ensure that the discharge does not break out onto the ground surface, and the discharge will not cause or contribute to a violation of the Massachusetts Surface Water Quality Standards.
- (7) The construction, installation, modification, operation or maintenance of a facility that recirculates landfill leachate on top of the landfill over an area that has been specifically designed, with a liner and collection system for the purpose of recycling the leachate and that has been approved by the Department in accordance with 310 CMR 19.000.
- (8) The construction, installation, modification, operation or maintenance of a conveyance or system of conveyances operated primarily for the purpose of collecting and conveying storm water runoff which does not constitute a "storm water discharge".
- (9) Any introduction of pollutants from non-point source agricultural, silvicultural, land management or right-of-way maintenance activities including runoff from orchards, cultivated crops, pastures, range lands, forest lands and rights-of-way, but not including point source discharges from concentrated animal feeding operations, discharges of silvicultural process water or any "storm water discharges" (as defined in 314 CMR 5.04(2)).

5.05: continued

- (10) The construction, installation, modification, operation or maintenance of a landfill approved by the Department pursuant to 310 CMR 19.000 provided that such facility does not result in a point source and does not result in a discharge which will cause or contribute to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*, impair the use of the ground water as an actual or potential source of potable water, or result in a threat to public health, safety, welfare, or the environment.
- (11) Any land application of sewage sludge provided it is performed in accordance with 310 CMR 32.00 and a plan approved by the Department.
- (12) The construction, installation, modification, operation or maintenance of a reclaimed water system in accordance with all the terms and conditions of a permit issued by the Department pursuant to 314 CMR 20.00.
- (13) The construction, installation, modification, operation, and maintenance of a satellite reclaimed water system in accordance with 314 CMR 20.00.
- (14) The use of reclaimed water in accordance with 314 CMR 20.00.
- (15) The fact that an activity does not require a permit in accordance with the provisions of 314 CMR 5.05 does not relieve the discharger of its responsibilities under other state regulations including, but not limited to, 310 CMR 27.00: *Underground Injection Control Regulations*.
- (16) Any discharge that results from a response action conducted or performed in accordance with the provisions of M.G.L. c. 21E and 310 CMR 40.0000.

5.06: Restrictions on the Issuance of a Permit

- (1) The Department shall not issue a permit pursuant to 314 CMR 5.00 when the discharge will cause or contribute to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* or impair the use of ground water as an actual or potential source of potable water. In addition, the Department shall not issue a permit pursuant to 314 CMR 5.00 for the following discharges:
 - (a) For the discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste.
 - (b) For a discharge within the Zone I of a public water supply source, or the six-month ground water travel time to the public water supply source, whichever is larger, of effluent from a POTW.
 - (c) For a discharge within the Zone A of a public water supply source of effluent from a POTW.
 - (d) For a discharge within the Zone II or Interim Wellhead Protection Area of a public water supply source of effluent from a POTW that treats industrial wastewater and has failed to establish and implement a pretreatment program as required by 314 CMR 12.08, 314 CMR 12.09 and 314 CMR 5.10(8)(a).
 - (e) For a discharge within the Zone I, Zone A, Zone II or Interim Wellhead Protection Area of a public water supply source of effluent from a Privately Owned Wastewater Treatment Facility (PWTF) that treats industrial wastewater.
 - (f) For a discharge within the Zone I of a public water supply source, or the six-month ground water travel time to the public water supply source, whichever is larger, of effluent from a PWTF limited to the treatment of sewage.
 - (g) For a discharge within the Zone A of a public water supply source of effluent from a PWTF limited to the treatment of sewage.
- (2) Notwithstanding the provisions of 314 CMR 5.06(1)(b), (c), (f), and (g), the Department may renew a permit for a discharge described in 314 CMR 5.06(1)(b), (c), (f), or (g), if the Department determines:
 - (a) the discharge was authorized by a permit issued by the Department before March 20, 2009;
 - (b) no action is proposed that will increase the volume of effluent or the amount of pollutants that will be discharged above that authorized in the permit issued by the Department prior to March 20, 2009; and

5.06: continued

- (c) the permit provides that the discharge meet the more stringent of the water quality based effluent limitations and the technology based effluent limitations set forth in 314 CMR 5.10(3) and (4) and the additional effluent limitations set forth in 314 CMR 5.10(4A) that apply to discharges within the two-year travel time to a ground water source for a public water system;
- (d) if the facility is a PWTF, the sewer system is not reasonably accessible and/or permission to enter such a sewer system cannot be obtained from the authority having jurisdiction over it, in accordance with M.G.L. c. 83, § 11; and
- (e) if the facility is a POTW that treats industrial wastewater, the POTW has a pretreatment program that meets the requirements of 314 CMR 12.08, 314 CMR 12.09 and 314 CMR 5.10(8)(a).

5.07: Effect of a Permit

Issuance of an individual permit or coverage under a general permit under 314 CMR 5.00 and 2.00 shall be deemed to allow, to the extent specified in the permit and 314 CMR 5.07, the permittee to discharge pollutants to ground waters of the Commonwealth, to construct, install, modify, operate and maintain an outlet for such discharge, together with any treatment works required to meet effluent limitations or other requirements specified in the permit for such discharge. Issuance of an individual permit under 314 CMR 5.00 and 2.00 shall also be deemed to allow to the extent specified in the permit and 314 CMR 20.00, the permittee to construct, install, modify, operate, and maintain a reclaimed water system and to use, sell, distribute and offer for use, sale or distribution the reclaimed water produced by said system in accordance with the permit and 314 CMR 20.00. Issuance of an individual permit or coverage under a general permit pursuant to 314 CMR 5.00 and 2.00 does not relieve the permittee of its obligation to comply with all applicable, Federal, State, and local laws and regulations.

5.08: Continuation of an Expiring Permit

- (1) The conditions of an individual permit continue in force under M.G.L. c. 30A, § 13 beyond the expiration date if:
 - (a) The permittee has made a timely application for renewal or issuance of an individual permit pursuant to 314 CMR 5.09A(3) which is a complete application under 314 CMR 5.09A(4) and (5) or submits a complete and timely notice of intent requesting coverage under a general permit in accordance with 314 CMR 5.13; and
 - (b) The Department does not renew or issue an individual permit or grant coverage under a general permit with an effective date under 314 CMR 2.08 on or before the expiration date of the previous permit, and does not issue a decision denying an application for an individual permit or modifying or revoking the previous permit. If, in *lieu* of applying for renewal or issuance of an individual permit as set forth in 314 CMR 5.08(1)(a), the permittee files a notice of intent requesting coverage under a general permit, the Department may, as provided in 314 CMR 5.13, require the permittee to apply for renewal or issuance of an individual permit or file a notice of intent requesting coverage under an alternative general permit and set a deadline for the permittee to file such application or notice of intent. In that event, the conditions of an individual permit continue in force beyond the expiration date as provided in 314 CMR 5.08(1)(b), only if the permittee submits a complete application for an individual permit or files a complete notice of intent requesting coverage under an alternative general permit by the deadline established by the Department.
- (2) Individual permits continued under 314 CMR 5.08 remain fully effective and enforceable.
- (3) The conditions of a general permit and coverage under a general permit continue beyond the expiration date as provided in 314 CMR 5.13.

5.09: Duty to Submit Hydrogeological Evaluation

(1) Except as otherwise provided in 314 CMR 5.09(2) or as otherwise determined by the Department, no person shall apply for an individual permit or file a notice of intent requesting coverage under a general permit for a proposed discharge of pollutants to the ground water without an authorization from the Department. A person shall apply for such authorization by:

- (a) preparing a scope of work for a hydrogeological investigation in accordance with the Department's guidelines to determine whether the proposed discharge site is a suitable location for the proposed discharge, to assess the impact of the proposed discharge on all potentially impacted ground water sources of potable water for public water systems and all private drinking water supplies, and to determine whether the proposed discharge will cause or contribute to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* or impair the actual or potential use of the ground water as a source of potable water;
- (b) placing a public notice in the *Environmental Monitor* that the scope of work has been prepared and will be submitted to the Department;
- (c) submitting to the Department for its review and approval the scope of work along with a copy of the public notice as published in the *Environmental Monitor*;
- (d) conducting a hydrogeological investigation in accordance with the scope of work approved by the Department and the Department's guidelines;
- (e) documenting the results of the hydrogeological investigation in a Hydrogeological Report prepared in accordance with the scope of work approved by the Department and the Department's Guidelines; and
- (f) submitting to the Department for its review and approval the Hydrogeological Report and a request for authorization by the Department to apply for an individual permit or to file a notice of intent requesting coverage under the general permit.

If a discharge is proposed within the Zone II or Interim Wellhead Protection Area of a ground water source of potable water for a public water system, the applicant shall also notify the public water system in writing by certified mail, return receipt requested, when the scope of work and Hydrogeological Report is submitted and at the same time provide a copy of said notice to the Department

The documents required by 314 CMR 5.09(1)(c) and 314 CMR 5.09(1)(f) shall be submitted to the Department along with the appropriate Department-approved form(s) and the applicable application fees. Until the Department promulgates regulations establishing a fee for the submission of the hydrogeological evaluation, an applicant shall meet the requirement to submit the hydrogeological evaluation by submitting the hydrogeological evaluation prior to the submission of an application for an individual permit or request for coverage under a general permit as provided in 314 CMR 5.00, without paying a separate fee in conjunction with that submission.

- (2) The requirements of 314 CMR 5.09(1) do not apply to:
 - (a) Persons applying for an individual permit or requesting coverage under a general permit for a storm water discharge as defined in 314 CMR 5.04(2);
 - (b) Persons who have filed an application for an individual permit pursuant to 314 CMR 5.00 prior to March 20, 2009;
- (3) Persons who have obtained a permit for the discharge pursuant to 314 CMR 5.00 on or before March 20, 2009; and
- (4) Persons who file a notice of intent requesting coverage under a general permit that expressly provides that compliance with 314 CMR 5.09(1) is not a condition of eligibility for coverage under the general permit.

5.09A: Application for a Permit

(1) <u>Duty to Apply</u>. Any person required to obtain a permit pursuant to 314 CMR 5.03 or 5.04 shall apply for an individual permit in accordance with 314 CMR 5.09A(5) or seek coverage under a general permit in accordance with 314 CMR 5.13 by completing and submitting the appropriate form(s). The Department may require the applicant to provide information and analyses as the Department deems necessary to determine whether the applicant and the proposed activity meet the requirements of 314 CMR 5.00 and applicable guidelines. Such information includes, but is not limited to, pollutant loading information, water quality analyses relevant to the discharge location, and information regarding areas and resources potentially impacted by the discharge, including without limitation, ground water sources for public water systems and private water supply wells.

5.09A: continued

(2) Who Must Apply. Except as otherwise provided in 314 CMR 5.09A(2) or otherwise determined by the Department, the owner of the treatment works or the owner of the activity resulting in a discharge of pollutants shall apply for an individual permit or request coverage under a general permit. For a POTW, the owner of the treatment works shall apply. For a PWTF, the applicant shall meet the requirements set forth in 314 CMR 5.15(1) through (3).

(3) Time to Apply.

- (a) Any person required to obtain a permit pursuant to 314 CMR 5.03 or 5.04, who does not have a currently effective permit, and who is applying for an individual permit, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the Department in writing. Persons proposing a new discharge are encouraged to submit their applications well in advance of the 180-day requirement to avoid delay.
- (b) Any person with a currently effective individual permit shall submit a new application for an individual permit or request coverage under a general permit at least 180 days before the expiration date of the existing individual permit, unless permission for a later date has been granted by the Department in writing.
- (c) A person required to obtain a permit pursuant to 314 CMR 5.03 or 5.04 who does not have a currently effective permit and who is requesting coverage under a general permit shall submit a notice of intent requesting such coverage in accordance with 314 CMR 5.13.
- (4) <u>Completeness</u>. The Department shall not issue a permit before receiving a complete application as required under 314 CMR 2.03(2). The Department will require that a complete application include any information that the Department determines is necessary or appropriate to assess the impact of the proposed discharge on the use of the receiving ground water as an actual or potential source of potable water or the existing and designated uses of downgradient hydrologically connected surface waters. Such additional information may include, without limitation, information on natural background conditions in the receiving ground waters and in hydrologically connected surface waters.
- (5) Except as otherwise provided in 314 CMR 5.09A(5)(d) or as otherwise determined by the Department, a complete application for an individual permit for a POTW or a PWTF shall include the following submissions along with the required Department-approved forms and permit application fees:
 - (a) Engineering Report prepared in accordance with all applicable Department guidelines by a Massachusetts Registered Professional Engineer with a concentration in sanitary, civil or environmental engineering. Said report shall include information on any conditions that have changed since the date of the Hydrogeological Report submitted in accordance with 314 CMR 5.09.
 - (b) A certification from a Massachusetts Registered Professional Engineer with a concentration in sanitary, civil or environmental engineering that:
 - 1. The Engineer has reviewed the Hydrogeological Report submitted in accordance with 314 CMR 5.09 and the Engineering Report submitted in accordance with 314 CMR 5.09A(5)(a) and has determined that the information presented in the Hydrogeological Report as updated by the Engineering Report accurately reflects conditions as of the date of the permit application; and
 - 2. The treatment works described in the Engineering Report will enable the facility to operate in compliance with the requirements of 314 CMR 5.00 including, but not limited to, effluent limitations established in accordance with 314 CMR 5.10;
 - (c) The signature of a person identified in 314 CMR 5.14 along with the certification required by 314 CMR 5.14.
 - (d) The provisions of 314 CMR 5.09A(5)(a) and (b) do not apply to applications filed prior to March 20, 2009.
- (6) If the applicant is requesting the Department to include special effluent limitations established in accordance with 314 CMR 5.10(9) in an individual permit for the discharge of an effluent as the result of the treatment of sewage at a treatment works, the applicant shall submit sufficient information to make the required demonstrations.

5.09A: continued

- (7) If the application is for a discharge of effluent from a PWTF, the applicant shall submit sufficient information to demonstrate compliance with all applicable requirements of 314 CMR 5.15.
- (8) If a discharge is proposed within the Zone II or Interim Wellhead Protection Area of a ground water source of potable water for a public water system, the applicant shall also notify the public water system in writing by certified mail, and provide a copy of said notice to the Department.

5.10: Permit Conditions

(1) <u>General Conditions</u>. The conditions in 314 CMR 5.16 apply to every individual and general permit issued under 314 CMR 5.00, whether or not expressly incorporated into the permit.

(2) Special Conditions.

(a) In addition to conditions applicable to all permits (314 CMR 5.10(1) and 5.16), the Department shall establish special conditions in general permits and, as required on a case-by-case basis in individual permits, to provide for and assure compliance with all applicable requirements of M.G.L. c. 21, §§ 26 through 53 and 314 CMR 5.00. An applicable requirement of M.G.L. c. 21, §§ 26 through 53 and 314 CMR 5.00 is a state statutory or regulatory requirement which takes effect prior to issuance of the permit. These requirements will be identified in the fact sheet or statement of basis prepared under 314 CMR 2.05.

At a minimum, the special conditions shall establish effluent limitations, other applicable requirements (314 CMR 5.10(3), and (4)); the duration of the permit (314 CMR 5.10(5)); monitoring, recordkeeping and reporting requirements (314 CMR 5.10(6)); and, where applicable, schedules of compliance (314 CMR 5.10(7)) and other conditions (314 CMR 5.10(8)).

- (b) <u>Effluent Limitations</u>. Except as expressly provided in 314 CMR 5.10(3)(c), 314 CMR (4)(a) 2, 314 CMR 5.10(4A), 314 CMR 5.10(4B), 314 CMR 5.10(4C), and 314 CMR 5.10(9), the Department shall apply the more stringent of the following:
 - 1. Water quality based effluent limitations under 314 CMR 5.10(3); or
 - 2. Technology based effluent limitations under 314 CMR 5.10(4).

In the case of reissued permits, the Department shall apply effluent limitations which are at least as stringent as those of the previous permit, unless the effluent limitations imposed by the previously issued permit are more stringent than subsequently promulgated effluent guidelines and one or more of the following conditions apply:

- a. the discharger has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities, but has nevertheless been unable to achieve the previous effluent limitations. In this case, the limitations in the renewed or reissued permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by the subsequently promulgated effluent limitation guidelines).
- b. The circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under 314 CMR 5.12.
- (3) Water Quality Based Effluent Limitations. Except as otherwise provided in 314 CMR 5.10(3)(c) and 314 CMR 5.10(9), all permits shall contain limitations which are adequate to assure that no pollutants shall be discharged in an amount or concentration that would impair the use of the ground water as an actual or potential source of potable water. All permits shall also contain limits which are adequate to protect surface waters for their existing and designated uses and to assure the attainment and maintenance of the Massachusetts Surface Water Quality Standards. The Department shall consider natural background conditions and any Total Maximum Daily Loads established by the Department, shall protect existing uses of hydrologically connected downgradient ground waters and surface waters, and shall not interfere with the maintenance and attainment of beneficial uses in hydrologically connected downgradient waters. Except as otherwise provided in 314 CMR 5.10(3)(c), 314 CMR 5.10(4A), 314 CMR 5.10(4B), 314 CMR 5.10(4C), and 314 CMR 5.10(9), the following water quality based effluent limitations shall apply to all discharges.

- (a) <u>Effluent Limitations for All Ground Waters</u>. Pathogenic Organisms shall not be present in amounts sufficient to render the ground water detrimental to the public health, safety, welfare, or the environment, or impair the use of the ground water as an actual or potential source of potable water. Pathogenic Organisms shall also not be present in amounts sufficient to interfere with the attainment and maintenance of the existing and designated uses of hydrologically connected downgradient surface waters. The discharge shall not exceed the maximum contaminant levels set forth in 310 CMR 22.00: *Drinking Water*.
- (b) The Department may establish water quality based effluent limitations for a pollutant subject to the maximum contaminant levels set forth in 310 CMR 22.00: *Drinking Water* that are more stringent than those specified in 314 CMR 5.10(3)(a), if such limitations are deemed necessary in the Department's best professional judgment to protect ground waters as an actual or potential source of potable water and/or surface waters of the Commonwealth for their existing and designated uses. The Department may also establish water quality based effluent limitations for other pollutants as deemed necessary in the Department's best professional judgment to protect the ground waters of the Commonwealth for use as an actual or potential source of potable water and the surface waters of the Commonwealth for their existing and designated uses as set forth in 314 CMR 4.00 including without limitation effluent limitations on contaminants which as of March 20, 2009 are not regulated by 310 CMR 22.00: *Drinking Water*. The Department will prohibit the discharge of any toxic pollutant for which the EPA or the Department has not yet developed a Health Advisory and for which there is not sufficient data available to the Department for the establishment of a Health Advisory. The Department may establish a Health Advisory for additional toxic pollutants when sufficient data becomes available.
- (c) Special Water Quality Based Effluent Limitations for Existing Discharges To Ground Water Previously Classified as Class III. A discharge that was authorized in a permit issued by the Department prior to March 20, 2009 to a ground water classified as a Class III Ground Water as of March 20, 2009, may, provided that no action is proposed that will increase the volume of effluent or the amount of pollutants that will be discharged above that authorized in the permit issued by the Department prior to March 20, 2009, be required to meet effluent limitations that vary from the requirements set forth in 314 CMR 5.10(3)(a) and (b) as follows:
 - 1. The concentrations of nitrate nitrogen shall not exceed 50 milligrams per liter;
 - 2. The concentration of total nitrogen shall not exceed 50 milligrams per liter; and
 - 3. There is no applicable standard for chlorides or total dissolved solids.

Notwithstanding the foregoing, the Department may require that a discharge to ground water classified as a Class III Ground Water as of March 20, 2009 that was not authorized by a permit issued by the Department prior to March 20, 2009 meet the water quality based effluent limitations set forth in 314 CMR 5.10(3)(a) and (b). The Department may also require that any discharge to ground water classified as a Class III Ground Water as of March 20, 2009 meet more stringent effluent limitations than those set forth in 314 CMR 5.10(3)(c), if it determines based on a Total Maximum Daily Load Report or otherwise, that additional and more stringent effluent limitations are necessary to ensure that the discharge will not cause or contribute to a violation of the Massachusetts Surface Water Quality Standards.

(4) Technology Based Effluent Limitations.

- (a) The following technology based effluent limitations shall apply to POTWs and Privately Owned Wastewater Treatment Facilities (PWTFs) that do not treat industrial wastewater.
 - 1. Except as provided in 314 CMR 5.10(4)(a)2, 314 CMR 5.10(4A), 314 CMR 5.10(4B), 314 CMR 5.10(4C), and 314 CMR 5.10(9), technology based limitations for discharges from POTW's and PWTFs that do not treat industrial wastewater shall be enhanced secondary treatment. Limitations defining enhanced secondary treatment may be expressed in terms of concentration as well as mass. Except as otherwise provided in 314 CMR 5.10(4A), 314 CMR 5.10(4B), or 314 CMR 5.10 (4C), the Department will not require disinfection unless the treatment works includes open sand beds, or unless the Department determines that disinfection is necessary to protect the public health, safety, welfare, or the environment.

- 2. Special Technology Based Effluent Limitations for Existing Discharges to Ground Water Previously Classified as Class III. A permit issued by the Department prior to March 20, 2009 authorizing a discharge to a ground water classified as Class III Ground Water as of March 20, 2009 may state that the technology based effluent limitation is primary treatment provided that no action is proposed that will increase the volume of effluent or the amount of pollutants that will be discharged above that authorized in the permit issued by the Department prior to March 20, 2009. Notwithstanding the foregoing, the Department shall require that any discharge to ground water classified as Class III Ground Water as of March 20, 2009 that was not authorized by a permit issued prior to March 20, 2009 receive treatment in addition to primary treatment. The Department may also require that any discharge to ground water classified as Class III Ground Water as of March 20, 2009 receive treatment in addition to that specified in 314 CMR 5.10(4)(a)2. if it determines based on a Total Maximum Daily Load or otherwise that such additional treatment is necessary to ensure that the discharge will not cause or contribute to a violation of the Massachusetts Surface Water Quality Standards.
- (b) <u>Technology Based Effluent Limitations for Privately Owned Wastewater Treatment Facilities</u> (PWTFs) that <u>Treat Industrial Wastewater</u>. Technology based limitations for discharges from PWTFs that treat industrial wastewater shall be the most stringent of the following:
 - 1. Limitations and standards for the applicable industrial category promulgated by EPA §§ 304, 306, 307 and 405 of the Federal Act, 33 U.S.C. §§ 1314, 1316, 1317, and 1345, to comply with the requirements of § 301 of the Federal Act, 33 U.S.C. § 1311.
 - 2. Limitations developed on a case-by-case basis which, in the Department's best professional judgment, define the appropriate level of control set forth in the Federal Act for the category of discharger or class of pollutants discharged. In defining the appropriate level of control hereunder, the Department will consider any draft or promulgated EPA effluent limitation guidelines, draft or proposed EPA development documents or guidance, any available state guidance, or any technology or process which has been demonstrated to be achievable in the experience of the Department for the class or category of discharger.
- (4A) <u>Additional and More Stringent Water Quality and Technology Based Effluent Limitations for Discharges within a Zone II or Interim Wellhead Protection Area.</u>
 - (a) Except as otherwise provided in 314 CMR 5.10(9), discharges within a Zone II or Interim Wellhead Protection Area of liquid effluent from a POTW or a PWTF shall, at a minimum, meet the following additional and more stringent water quality based effluent limitations and technology based effluent limitations:
 - 1. Total Suspended Solids shall not exceed ten milligrams per liter;
 - 2. Turbidity shall not exceed five NTU;
 - 3. Total Organic Carbon shall not exceed three milligrams per liter unless otherwise determined by the Department; In making this determination the Department may consider, but not be limited to the following:
 - a. The location of the discharge relative to the Zone of Contribution as determined by a Hydrogeological Evaluation as provided in 314 CMR 5.09; and
 - b. Mitigation or additional source protection measures provided;
 - 4. The effluent shall be filtered and disinfected to meet an effluent limitation of no more than 200 fecal coliform organisms per 100 ml. This disinfection requirement shall not be waived.
 - (b) Any POTW that treats industrial wastewater and discharges a liquid effluent within a Zone II or Interim Wellhead Protection Area shall have a pretreatment program that meets the requirements of 314 CMR 12.08, 314 CMR 12.09 and 314 CMR 5.10(8)(a). A PWTF located within a Zone II or IWPA shall not treat industrial wastewater.
 - (c) Except as otherwise provided in 314 CMR 5.10(9), a discharge, located within a Zone II or Interim Wellhead Protection Area of a ground water source and the two-year ground water travel time to the source, of a liquid effluent from a POTW or a PWTF shall, at a minimum, meet the following additional and more stringent water quality based limitations:
 - 1. Total Suspended Solids shall not exceed five milligrams per liter;
 - 2. Turbidity shall not exceed two NTU;

- 3. Biological Oxygen Demand (BOD) shall not exceed ten milligrams per liter;
- 4. Total Organic Carbon (TOC) shall not exceed one milligrams per liter; and
- 5. Total nitrogen and nitrate nitrogen shall not exceed five milligrams per liter.
- (d) Except as otherwise provided in 314 CMR 5.10(9), a discharge, located within a Zone II or Interim Wellhead Protection Area of a ground water source and the two-year ground water travel time to the source, of a liquid effluent from a POTW or a PWTF shall, at a minimum, meet the following additional technology based limitations:
 - 1. The effluent shall at all times be oxidized, filtered, and disinfected so that the median concentration of fecal coliform in the disinfected effluent does not exceed a limit of no detectable colonies per 100 milliliters over a continuous seven day sampling period, and no sample shall exceed a limit of 14 colonies per 100 milliliters.
 - 2. The permittee shall demonstrate that the disinfection process can inactivate and/or remove five logs of F-specific bacteriophage of MS 2 or poliovirus from the effluent. A virus at least as resistant as poliovirus may be used for the purpose of demonstration. This requirement may be met by a combination of removal and inactivation. Compliance may also be based on the treatment process, turbidity and type of performance of the disinfection.
 - 3. The disinfection requirements shall not be waived. The Department may allow the effluent to be filtered without coagulation if the turbidity requirement can be satisfied after filtration without coagulation.
- (e) Notwithstanding anything to the contrary in 314 CMR 5.10(4A), the Department may allow a discharge, located within a Zone II or Interim Wellhead Protection Area, of effluent from a POTW or a PWTF to meet effluent limitations that are less stringent than required by 314 CMR 5.10(4A)(a), (c) and (d) provided that:
 - 1. The discharge was authorized by a permit issued pursuant to 314 CMR 5.00 prior to March 20, 2009;
 - 2. The effluent is not from a PWTF that treats industrial wastewater;
 - 3. No action is proposed that will increase the volume of the discharge or the amount of pollutants discharged above that authorized in the permit issued prior to March 20, 2009
 - 4. The continued discharge of effluent from the POTW or PWTF will not impair the use of the ground water as an actual or potential source of drinking water;
 - 5. The continued discharge of effluent from the POTW or PWTF will not cause or contribute to a violation of the Massachusetts Surface Water Quality Standards; and
 - 6. The discharge is required to meet effluent limitations at least as stringent as those set forth in the permit issued prior to March 20, 2009.
 - 7. The discharge is outside the six-month ground water travel time to the public water source for a public water system.
- (f) If, pursuant to 314 CMR 5.10(4A)(e), the Department issues a permit that allows a discharge within a Zone II or Interim Wellhead Protection Area to meet effluent limitations less stringent than required by 314 CMR 5.10(4A)(a), (c) and (d), the Department may modify the permit to provide that the discharge meet the applicable effluent limitations set forth in 314 CMR 5.10(4A)(a), (c) and (d) if, at permit renewal, or any other time, the Department determines that such modification is necessary to protect the public health, safety, welfare, or the environment.
- (4B) Additional and More Stringent Effluent Limitations for Discharges within 100 feet of an Irrigation Well. If a permit authorizes the discharge of reclaimed water within 100 feet of an irrigation well, the permit shall establish effluent limitations that are at least as stringent as effluent limitations established in accordance with 314 CMR 20.17(8).
- (4C) Additional and More Stringent Effluent Water Quality and Technology Based Effluent Limitations for Discharges from Treatment Works that Discharge an Effluent to the Ground Water without the Benefit of Treatment in the Unsaturated Zone. If an applicant proposes a wastewater treatment facility that does not include treatment in the unsaturated zone prior to discharge to the ground water, the permit shall require the discharge to meet the effluent limitations set forth in 314 CMR 5.10(4A) that apply to discharges within a Zone II or Interim Wellhead Protection Area of a ground water source and the two-year ground water travel time to the source.

(5) <u>Duration of Permits</u>. Permits shall be effective for a fixed term not to exceed five years. The Department may issue any permit for a lesser duration.

(6) Monitoring, Recordkeeping and Reporting Requirements.

- (a) Each permit shall contain monitoring requirements to assure compliance with permit limitations and conditions, including the installation of monitoring wells to ensure the protection of the ground water as an actual or potential source of potable water and surface waters for their existing and designated uses and to assure the attainment and maintenance of the Massachusetts Surface Water Quality Standards. The Department shall approve the number, location, dimensions, method of construction, sampling parameters, and method of sampling of monitoring wells. The type, intervals, and frequency of monitoring shall be sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring. Monitoring requirements may include the mass (or other measurement specified in the permit) for each pollutant limited in the permit, the volume of effluent discharged from each facility, and other measurements as appropriate (including biological monitoring methods when appropriate). Monitoring shall be conducted in accordance with the provisions of 314 CMR 5.16(10). Permittees shall maintain records of all monitoring activities in accordance with 314 CMR 5.16(11).
- (b) Each permit shall contain requirements to report monitoring results with a frequency dependent on the nature and effect of the discharge, but in no case less than once a year. Pollutants for which the permittee must report violations of maximum daily discharge limitations under 314 CMR 5.16(20)(e) shall be listed in the permit.
- (c) The determination of compliance of discharges with the effluent limitations and other relevant conditions in the permit will be made through tests or analytical determination of ground water and effluent samples collected, transported and stored in such manner as outlined in the most recent edition of Standard Methods for the Examination of Water and Wastewater, American Public Health Association *et al* and the latest EPA analytical procedures. The Department shall approve the location at which ground water samples are taken and the influent and effluent sampling locations. The location at which effluent samples are collected shall be at a point where the effluent emerges from a treatment works, disposal system, outlet or point source and prior to being discharged to the ground, unless otherwise approved by the Department. In selecting or approving monitoring well locations and construction, the Department shall consider all relevant facts including, but not limited to:
 - 1. The mobility of pollutants in the unsaturated zone and the pollutant attenuation mechanisms in this zone:
 - 2. Attenuation mechanisms, which may remove potential pollutants in passage through the soil;
 - 3. The relative thickness of the unsaturated zone;
 - 4. Attenuation of pollutant concentrations with distance, which may occur in the saturated zone as a result of the attenuation process occurring below the water table; and
 - 5. Information from the approved Hydrogeological Report, including but not limited to, information on ground water levels, ground water flows, and soils information.
- (d) <u>Tests or Analytical Determinations</u>. Tests and analytical determinations to determine compliance with standards, limitations and criteria shall be made in accordance with methods approved by the Department for that purpose.

(7) Schedule of Compliance.

- (a) A permit may, when appropriate, specify a schedule leading to compliance with M.G.L. c. 21, §§ 26 through 53. Any such schedule shall require compliance as soon as possible. Each schedule shall set forth dates to accomplish interim requirements leading toward compliance. Beginning with the date of permit issuance, the time between interim dates shall not exceed one year. If the time necessary for completion of any interim requirement is more than one year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.
- (b) The first permit issued for a discharge which commences shall not contain a schedule of compliance. No new or recommencing discharge shall commence operations or discharge prior to installation and operation of all treatment works necessary to comply with the effluent limitations established in the permit.

- (8) Other Conditions. In addition to the conditions established under 314 CMR 5.10(1) through (7), a permit may include special conditions as follows:
 - (a) Requirements for POTWs to comply with pretreatment provisions under 314 CMR 12.00; including:
 - 1. The identification, in terms of character and volume of pollutants, of any significant indirect discharge into the POTW subject to the prohibitions and standards of 314 CMR 12.08;
 - 2. The establishment of a POTW pretreatment program in accordance with 314 CMR 12.09, including any necessary schedule of compliance for adoption of the program;
 - 3. The incorporation of an approved POTW pretreatment program in the permit; and
 - 4. The submittal by a POTW of the reports required by 314 CMR 12.09(3).
 - (b) A permit may impose similar pretreatment requirements on a PWTF that treats industrial wastewater if it determines such requirements are necessary to ensure that the discharge will not:
 - 1. interfere with the use of the ground water as an actual or potential source of potable water;
 - 2. cause or contribute to a violation of 314 CMR 4.00: Massachusetts Surface Water Quality Standards; or
 - 3. pose a threat to the public health, safety, welfare, or the environment.
 - (c) Requirements applicable to the management of hazardous wastes for treatment works subject to the provisions of 314 CMR 8.00.
 - (d) Requirements to control or abate the discharge of pollutants through the application of best management practices when:
 - 1. Authorized under § 304(e) of the Federal Act, 33 U.S.C. 1314(e), for the control of toxic pollutants and hazardous substances from ancillary and industrial activities;
 - 2. Numerical effluent limitations are infeasible; or
 - 3. The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53.
 - (e) Requirements to monitor, record, and report the quality of water at upgradient and downgradient monitoring wells to determine that the discharge does not impair the use of the ground water as an actual or potential source of potable water and will not cause or contribute to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*.
 - (f) Requirements to prepare and submit monthly operating reports under 314 CMR 12.07.
 - (g) Requirements imposed in grants or loans made by EPA or the Department to POTW's under the Federal Act or M.G.L. c. 29C which are reasonably necessary for the achievement of effluent limitations and compliance with all the terms and conditions of the permit and/or 314 CMR 5.00.
 - (h) Requirements governing the disposal of sludge from treatment works.
 - (i) Requirements for the periodic submission of reports regarding the condition and capacity of a treatment works, including any portion of a sewer system.
 - (j) Requirements for the operation, maintenance and staffing of treatment works, including but not limited to, the following:
 - 1. Submission of an Operation and Maintenance and Staffing Plan (the Operations and Maintenance Plan) to the Department for its review and approval at least 90 days before the facility commences operation or at least 45 days before the permit takes effect, whichever last occurs. The Operation and Maintenance Plan shall document how the permittee intends to operate, maintain and staff the facility in accordance with all applicable requirements including the permit, 314 CMR 5.00, 257 CMR 2.00, and 314 CMR 12.00. The Operation and Maintenance Plan shall include a preventative maintenance program to ensure that all equipment is kept in a reliable condition. The Operation and Maintenance Plan shall include a plan to staff the facility in accordance with all applicable regulations including without limitation 257 CMR 2.00. If the permit authorizes the use of some or all of the effluent as reclaimed water in accordance with 314 CMR 20.00, the Operation and Maintenance Plan shall also include an emergency contingency plan that establishes standard operating procedures that must be followed when the reclaimed water does not meet the applicable effluent limitations.
 - 2. Operation of the facility in accordance with the Operation and Maintenance Plan approved by the Department, 314 CMR 5.00 and 314 CMR 12.00.

- 3. Submission of a revised Operation and Maintenance Plan whenever there are proposed modifications to the facility, the standard operating procedures for the facility, or the staff of the facility.
- 4. Except as otherwise determined by the Department, implementation of proposed changes only after the revised Operation and Maintenance Plan is approved by the Department.
- 5. If the permittee intends to enter into a contract with a third party (the contract operator) for the operation and maintenance of the facility, at least 90 days prior to the date the contract operator intends to commence operation of the facility, the permittee shall submit a draft unsigned contract to the Department for its review and approval. The contract shall provide that the contract operator shall operate and maintain the facility in accordance with the approved Operation and Maintenance Plan, 314 CMR 20.00, 314 CMR 12.00, and 257 CMR 2.00. The permittee shall not execute the contract and authorize the contract operator to operate the facility unless and until the Department has approved the contract in writing.
- (k) <u>Use of Effluent as Reclaimed Water in Accordance with 314 CMR 20.00</u>. A permit issued pursuant to 314 CMR 5.00 may authorize the use, sale or distribution of some or all of the effluent from the permitted facility as reclaimed water, in accordance with 314 CMR 20.00, provided that the facility is a reclaimed water system as defined in 314 CMR 5.02. Any such permit shall contain the conditions governing the operation and maintenance of a reclaimed water system and the treatment, use, sale and distribution of reclaimed water set forth in 314 CMR 20.00.
- (l) <u>Conditions for Privately Owned Wastewater Treatment Facilities That Treat At Least Some Sewage from Residential Uses, Hospitals, Nursing or Personal Care Facilities, Residential Care Facilities and/or Assisted Living Facilities.</u>
 - 1. A permit for a Privately Owned Wastewater Treatment Facility (PWTF) that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities shall contain the following additional conditions:
 - The permittee shall establish and maintain a financial assurance mechanism that provides for the continued availability of an immediate repair and replacement account to be used by the permittee solely for the immediate repair and replacement of any failing components of the PWTF. To create an immediate repair and replacement account, the permittee shall deposit at least 15% of the estimated construction cost of the PWTF into an interest bearing escrow account in accordance with the financial assurance mechanism and 314 CMR 5.15. The permittee shall also establish and maintain a financial assurance mechanism in accordance with 314 CMR 5.15 that provides for the accumulation in a capital reserve account of sufficient funds to make any necessary modifications to the PWTF and other related equipment within 20 years from the date the PWTF commenced operation or such other period determined to be appropriate by the Department based on the age and condition of the PWTF. The financial assurance mechanism shall provide for the accumulation in the capital reserve account of an amount equal to at least 25% of the estimated construction cost of the PWTF. On or before January 31st of each year, the permittee shall submit an annual financial report identifying the initial and current balances in the immediate repair and replacement account and the capital reserve account and confirming the continuing availability of the funds in said account for the purposes specified in the permit and 314 CMR 5.15. Said report shall be prepared in accordance with generally accepted accounting principles.
 - b. The permittee shall meet the obligation to establish all required financial assurance mechanisms by using Department-approved form documents and shall submit said Department-approved form documents to the Department for its review and approval.
 - c. The permittee shall maintain the current form documents evidencing all required financial assurance mechanisms approved by the Department. The permittee shall perform all its obligations under the required financial assurance mechanisms as approved by the Department.

- d. For purpose of the financial assurance mechanism requirement, the estimated construction cost of the wastewater treatment facility shall include the cost of constructing the wastewater treatment plant, collection system, associated mechanical equipment, but not including the land, ground and disposal area.
- 2. A permit for a PWTF that does not treat any sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities may include the conditions set forth in 314 CMR 5.10(8)(I)1. requiring the permittee to establish and maintain a financial assurance mechanism that provides for an immediate repair and replacement account and/or a capital reserve account in accordance with 314 CMR 5.15(4) and (5) if, at the time of permit renewal or any other time, the Department determines that establishment and maintenance of a financial assurance mechanism is necessary to ensure that the PWTF operates in compliance with its permit and/or 314 CMR 5.00 and/or to protect the public health, safety, welfare, or the environment. In making this determination, the Department shall consider the compliance history of the PWTF and the risk the PWTF poses to the public health, safety, welfare or the environment, including without limitation, actual and potential sources of potable water for a public water system and downgradient hydrologically connected surface waters,
- (9) Special Effluent Limitations. A permit may establish special effluent limitations less stringent than the water quality based effluent limitations set forth in 314 CMR 5.10(3) and the technology based limitations set forth in 314 CMR 5.10(4), as provided in 314 CMR 5.10(9)(a) through (h), if and only if, it is demonstrated to the satisfaction of the Department that the special effluent limitations are sufficient to protect the use of the ground water as an actual or potential source of potable water and to protect the use of surface waters for the designated uses set forth in 314 CMR 4.00. The Department shall not issue a permit with special effluent limitations as provided in 314 CMR 5.10(9)(a) through (h), unless it determines based on a Total Maximum Daily Load or otherwise that the discharge will not cause or contribute to a violation of the Massachusetts Surface Water Quality Standards.
 - (a) A permit may establish special effluent limitations less stringent than the water quality based effluent limitations listed in 314 CMR 5.10(3)(a) and (b) and the technology based effluent limitations set forth in 314 CMR 5.10(4)(a), where it is demonstrated to the satisfaction of the Department that the permitted facility is a treatment works designed, constructed, operated and maintained for the purpose of restoring a contaminated ground water and the discharge from such facility will not cause the ground waters receiving the discharge or any hydrologically connected downgradient surface waters of the Commonwealth to be further degraded.
 - (b) A permit may specify effluent limitations less stringent than the water quality based effluent limitations listed in 314 CMR 5.10(3)(a) and (b) where it is demonstrated to the satisfaction of the Department that natural background conditions preclude the ground water receiving the discharge from meeting the water quality based effluent limitations listed in 314 CMR 5.10(3)(a) and (b).
 - (c) An individual permit for a discharge of an effluent as the result of the treatment of sewage by a treatment works may specify effluent limitations less stringent than the water quality based effluent limitations listed in 314 CMR 5.10(3)(a) and (b) and the technology based effluent limitations specified in 314 CMR 5.10(4)(a), where it is demonstrated to the satisfaction of the Department that all the following conditions are met:
 - 1. The ground water is not an underground source of drinking water because:
 - a. it currently does not serve as a source of drinking water; and
 - b. it cannot now and will not in the future serve as a source of public drinking water because
 - (i) it is used to produce mineral, hydrocarbon or geothermal energy,
 - (ii) it is so contaminated or located at a depth or location that it would be economically or technologically infeasible, or
 - (iii) it is not fit for human consumption.
 - 2. The proposed discharge will not present an actual or potential public health hazard.
 - 3. The proposed discharge will not cause the water quality of any public or private water supply to violate the maximum contaminant limits set forth in 310 CMR 22.00: *Drinking Water*.

- (d) In determining whether an applicant has made the demonstration required by 314 CMR 5.10(9)(c), the Department shall, at a minimum, consider the following factors:
 - 1. the volume and physical, chemical, and biological characteristics of the waste in the proposed discharge;
 - 2. the nature and extent of the area that may be affected by the potential movement of the contaminant plume that may result from the proposed discharge (the potentially impacted area);
 - 3. the hydrological characteristics of the potentially impacted area and its connection to hydrologically connected downgradient ground waters and surface waters;
 - 4. the existing quantity and quality of ground water and surface water in the impacted area; and
 - 5. the proximity of the proposed discharge to surface waters and to ground water withdrawals including without limitation wells for public water systems and private water supply wells.
- (e) An individual permit for the discharge of a liquid effluent as a result of the treatment of sewage at a treatment works may specify that the discharge meet the water quality based limitation for nitrate nitrogen and total nitrogen of ten milligrams per liter at selected monitoring wells located along the downgradient property boundary instead of at the point of discharge, where the discharger completes a nitrogen analysis in accordance with Department guidelines and demonstrates to the satisfaction of the Department that:
 - 1. The water quality based limitation for nitrate nitrogen and total nitrogen of ten milligrams per liter will be met at all points at which the discharge will reach any ground water source of potable water for a public water system and any private water supply well; and
 - 2. The discharge is outside a Zone I, Zone II, Interim Wellhead Protection Area, Private Water Supply Area, Zone A, sole source aquifer, potentially productive aquifer, or nitrogen sensitive area designated by the Department in accordance with 310 CMR 15.215.
- (f) An individual permit for a discharge of a liquid effluent as the result of treatment of sewage at a treatment works may specify that the discharge meet effluent limitations for nitrate nitrogen and total nitrogen of five mg/l at selected monitoring wells located along the down gradient property boundary in *lieu* of meeting the applicable effluent limitation for nitrate nitrogen and total nitrogen set forth in 314 CMR 5.10(3)(a), 314 CMR 5.10(4)(a)1. and 314 CMR 5.10(4A) at the point of discharge, where the discharger completes a nitrogen analysis in accordance with Department guidelines and demonstrates to the satisfaction of the Department that:
 - 1. The discharge is located within a Zone II, Interim Wellhead Protection Area, Private Water Supply Area, Zone A, a sole source aquifer, a potentially productive aquifer, or a nitrogen sensitive area designated by the Department in accordance with 310 CMR 15.215;
 - 2. The applicable water quality based limitations and the technology based limitations for nitrate nitrogen and total nitrogen set forth in 314 CMR 5.10(3)(a), 314 CMR 5.10(4)(a)1. and 314 CMR 5.10(4A) will be met at all points at which the discharge will reach any ground water source of potable water for a public water system and any private water supply well;
 - 3. The treatment works was in existence and permitted prior to March 20, 2009.
 - 4. There is no increase in the volume of the discharge or amount of pollutants discharged above that authorized by the permit issued prior to March 20, 2009; and
 - 5. The discharge complies with the requirements of the Bureau of Resource Protection's Interim Policy entitled Nutrient Loading Approach to Wastewater Permitting and Disposal dated August 20, 1999. Notwithstanding the foregoing, the Department may modify any ground water discharge permit that has requirements based on said Interim Policy to include additional conditions or more stringent requirements when the ground water discharge permit is renewed, or at any other time that the Department determines such additional conditions are necessary for the protection of the public health, safety, welfare or the environment.

5.10: continued

- (g) A permit issued pursuant to 314 CMR 5.10(9)(e) or (f) may impose additional effluent limitations and require the implementation of additional measures to protect the ground water as an actual or potential source of potable water and surface waters for their existing and designated uses. Such additional effluent limitations and measures include but are not limited to, limitations on the total pounds of nitrate nitrogen and/or total nitrogen discharged to the site over a calendar year, limitations on parameters in addition to nitrate nitrogen and total nitrogen, monitoring of parameters in addition to nitrate nitrogen at the point of discharge and/or at selected monitoring wells along the property line, land use controls, best management practices and household hazardous waste collection. If a permit is issued pursuant to 314 CMR 5.10(9)(e) or (f) for a discharge from a treatment works in existence prior to March 20, 2009, there shall be no reduction in the level of treatment from that provided prior to March 20, 2009.
- (h) An individual permit for the discharge of an effluent as the result of the treatment of sewage at a seasonal wastewater treatment facility in existence as of March 20, 2009 that is located outside of a Zone II, Interim Wellhead Protection Area, Private Water Supply Area, or nitrogen sensitive area designated by the Department in accordance with 310 CMR 15.215 may establish the special effluent limitations as follows. The special effluent limitations shall restrict the total pounds of biochemical oxygen demand, total suspended solids, nitrate nitrogen and total nitrogen discharged to the ground from the treatment works over a calendar year to the total pounds of the aforementioned pollutants that would have been discharged during said calendar year, if the discharge occurred throughout the year in compliance with the more stringent of the water quality based effluent limitations and the technology based limitations set forth in 314 CMR 5.10(3)(a), 314 CMR 5.10(3)(b), and 314 CMR 5.10(4(a)1., provided that it is demonstrated to the satisfaction of the Department that the water quality based limitations set forth in 314 CMR 5.10(3)(a) and (b) will be met at all points at which the discharge will reach any source for a public water system and any private water supply well.

5.11: Ground Water Standards

- (1) Except as otherwise provided in 314 CMR 5.11(2), or unless the Department determines that the ground water is not an underground source of drinking water as provided in 314 CMR 5.10(9)(c), all ground waters of the Commonwealth are designated as a source of potable water supply and the minimum criteria applicable to all ground waters of the Commonwealth shall be the effluent limitations set forth in 314 CMR 5.10(3)(a) and (b).
- (2) The ground waters classified as Class III Ground Waters prior to March 20, 2009 are designated for uses other than a source of potable water supply. At a minimum, the most sensitive use of these ground waters shall be as a source of non-potable water which may come in contact with, but is not ingested by humans. The minimum criteria applicable to such ground waters shall be the effluent limitations set forth in 314 CMR 5.10(3)(a) and (b) as modified by 314 CMR 5.10(3)(c).
- (3) To prevent the ground waters classified as Class III Ground Waters prior to March 20, 2009 from being further degraded, the Department may require that any discharge to such ground waters not authorized by a permit issued by the Department prior to March 20, 2009 and any increase in the volume or amount of pollutants above that authorized by a permit issued by the Department prior to March 20, 2009 to such waters meet the more stringent of the water quality based effluent limitations and the technology based effluent limitations set forth in 314 CMR 5.10(3)(a) and (b) and 314 CMR 5.10(4). Alternatively, the Department may require the discharge to meet the special effluent limitations set forth in 314 CMR 5.10(9), if the permittee requests such limitations and makes the required demonstrations.

5.12: Modification, Suspension, Revocation, Renewal, and Transfer of Permits

(1) As provided in M.G.L. c. 21, § 43(10), the Department may suspend or revoke any outstanding individual permit, or coverage under a general permit in whole or in part, for cause including, but not limited to, violation of any permit term, obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts or any changes in or discovery of conditions that call for the reduction or discontinuance of the authorized discharge or activity. The suspension or revocation of an individual permit or coverage under a general permit shall be processed in accordance with 314 CMR 2.00.

- (2) The Department may modify an individual permit or coverage under a general permit at the request of the permittee upon a showing satisfactory to the Department that the requested modification is appropriate in view of circumstances for which the permittee is not at fault. Except as otherwise provided in 314 CMR 5.12(3), the modification of an individual permit or coverage under a general permit shall be processed in accordance with the provisions of 314 CMR 2.00. An individual permit or coverage under a general permit may be transferred by the permittee to a new permittee only if the individual permit or coverage under the general permit has been modified or revoked and reissued in accordance with 314 CMR 2.00, a minor modification is made in accordance with 314 CMR 5.12(3) and (4), or an automatic transfer takes place in accordance with 314 CMR 5.12(5). Any permit which authorizes the operation of a RCRA facility subject to the requirements of 314 CMR 8.07 shall be valid only for the person to whom it is issued and may not be transferred. Operation of a RCRA facility by an owner or operator who is not named in the permit shall be a violation of 314 CMR 5.00 and a basis for revocation of the permit, or other enforcement action.
- (3) <u>Minor Modifications of Individual Permits</u>. Upon the request or consent of the permittee, the Department may modify an individual permit to make the following minor modifications without following the procedures of 314 CMR 2.00:
 - (a) correction of typographical errors;
 - (b) requirements for more frequent monitoring or reporting by the permittee;
 - (c) requirements for the monitoring of additional parameter(s);
 - (d) requirements for the replacement of damaged monitoring well(s) at a nearby location or for the installation of additional monitoring wells;
 - (e) deletion of an outfall when the discharge from that outfall is terminated and does not result in the discharge of pollutants from other outfalls except in accordance with permit limits; and
 - (f) changes in an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement.

Upon the request or consent of the permittee, the Department may modify an individual permit or coverage under a general permit to allow for a change in ownership or operational control of a facility where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department in accordance with the terms and conditions of the permit, 314 CMR 5.12(4) and if applicable 314 CMR 5.12(5).

- (4) <u>Transfer of Individual Permits or Coverage Under a General Permit</u>. Upon the request or consent of the permittee, the Department may transfer an individual permit or coverage under a general permit to a new permittee without following the procedures set forth in 314 CMR 2.00 if the following conditions are satisfied:
 - (a) The Department receives written notice of the transfer from the current permittee at least 30 days in advance of the proposed transfer date;
 - (b) The notice includes a written agreement between the existing and new permittee, which includes a specific date for transfer of the permit and the proposed new transferee's assumption of responsibility for compliance with all the terms and conditions of the permit. If the permit requires the establishment of financial assurance mechanism(s) in accordance with 314 CMR 5.15, the notice shall include sufficient documentation to demonstrate that the proposed new transferee meets all the requirements of 314 CMR 5.15 and the written agreement shall provide for the allocation of liability and financial responsibility for all required financial assurance mechanisms; and
 - (c) The Department approves the transfer in writing. The transfer shall take effect on the date the transfer is approved by the Department.

If the proposed new transferee will operate a PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, or assisted living facilities or that has been required to establish financial assurance mechanism(s) pursuant to 314 CMR 5.15(6), the Department shall not approve the transfer unless the notice submitted pursuant to 314 CMR 5.12(4)(b) contains sufficient information to demonstrate to the satisfaction of the Department that:

- 1. the proposed new transferee is in compliance with the financial assurance mechanism requirements of 314 CMR 5.15(4) and (5); and
- 2. all required funds have been placed in the immediate repair and replacement account and the capital reserve account.
- (5) <u>Automatic Transfers</u>. As an alternative to transfers under 314 CMR 5.12(4), a permit may be automatically transferred to a new permittee if:
 - (a) The facility authorized by the permit is not a PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, or assisted living facilities or that has been required to establish financial assurance mechanism(s) pursuant to 314 CMR 5.15(6);
 - (b) The facility is not or a RCRA facility subject to the requirements of 314 CMR 8.07;
 - (c) The facility is not a reclaimed water system;
 - (d) The current permittee notifies the Department in writing of the proposed transfer at least 30 days in advance of the proposed transfer date;
 - (e) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - (f) The Department does not notify the existing permittee and the proposed new permittee before that proposed transfer date that it intends to modify or revoke and reissue the permit or that it requires additional information. In that event, the transfer is effective on the proposed transfer date.
- (6) <u>Time to Apply for Renewal of an Individual Permit</u>. Any person with a currently effective individual permit shall submit an application to renew the permit in accordance with 314 CMR 5.12 at least 180 days before the expiration of the existing permit, unless permission for a later date has been granted by the Department in writing.
- Contact Additional Requirements for Renewal of Individual Permits for POTWs or PWTFs that Discharge Effluent as the Result of the Treatment of Sewage. Unless otherwise determined by the Department, a permittee responsible for the operation of a POTW or a PWTF that discharges an effluent as the result of the treatment of sewage only shall, when applying for renewal of an individual permit for a facility that has been in operation for more than 14 but less than 19 years, submit to the Department for its review and approval an engineering report prepared by a Massachusetts Registered Professional Engineer with a concentration in civil, sanitary or environmental engineering. The engineering report shall outline in sufficient detail what facility modifications or other changes, if any, are needed to ensure that the facility is capable of complying with the permit through the next five-year permit term and beyond. Along with the engineering report, the permittee shall submit a financial plan containing cost estimates for implementing the proposed facility modifications and other changes identified in the engineering report and demonstrate how the permittee will finance the needed facility modifications or other changes on or before the date 20 years from the date that the facility commenced operation. The permittee shall implement the modifications and other changes identified in the engineering report as approved by the Department in accordance with a schedule approved by the Department.
- (8) The Department may require submission of the engineering report and financial plan described in 314 CMR 5.12(7) when a permittee operating a POTW or a PWTF that discharges an effluent as the result of the treatment of sewage only that has been in operation for more than 19 years applies for renewal of an individual permit, if the permittee did not submit said report and plan with its last application for permit renewal, or if the Department determines that submission of said report and financial plan is necessary to ensure that the facility remains capable of operating in compliance with 314 CMR 5.00 or the permit, or in a manner that adequately protects the public health, welfare, safety, or the environment.
- (9) <u>Administrative Renewal of Permits</u>. The Department may administratively renew an individual permit by extending the existing permit for an additional five years provided that all the following conditions are met:
 - (a) The permittee submits a timely application for administrative renewal in accordance with 314 CMR 5.12(6);

- (b) The permittee submits to the Department proof that the permittee has provided public notice in accordance with 314 CMR 2.06;
- (c) The permittee does not seek to modify the treatment works and any best management practices authorized by the existing permit, and the Department has not determined that any modifications are necessary;
- (d) The permittee has operated and is operating all treatment works and best management practices authorized by the permit in accordance with the approved Operation and Maintenance Plan, the permit, 314 CMR 5.00, and 314 CMR 12.00, and has submitted documentation evidencing implementation of the Operation and Maintenance Plan, the permit, 314 CMR 5.00, and 314 CMR 12.00;
- (e) A Massachusetts Registered Professional Engineer with a concentration in civil, sanitary or environmental engineering has inspected the treatment works and any best management practices required by the permit and based on that inspection, has certified to the Department in writing that there are no deficiencies in said treatment works and best management practices that prevent or would prevent the discharge from meeting all the terms and conditions of the permit, including but not limited to, the effluent limitations set forth in 314 CMR 5.00;
- (f) The Department has determined that more stringent effluent limitations or requirements in addition to those set forth in the existing permit are not necessary to protect the ground water as an actual or potential source of potable water, to prevent the discharge from causing or contributing to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*, or to bring the permittee into compliance with the permit, 314 CMR 5.00, and 314 CMR 12.00;
- (g) If the facility is a PWTF that treats sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities or assisted living facilities, or the permittee is required to establish financial assurance mechanism(s) pursuant to 314 CMR 5.15(6), the permittee is in compliance with all applicable financial assurance mechanism requirements in accordance with 314 CMR 5.15 and 314 CMR 5.10(8)(l);
- (h) The facility is not a PWTF that treats industrial wastewater;
- (i) The permittee is not required to submit an engineering report in accordance with 314 CMR 5.12(7) or (8); and
- (j) The application is signed by a person identified in 314 CMR 5.14 and includes the certification set forth in 314 CMR 5.14.
- Applications for Renewals of Individual Permits That Are Not Eligible for Administrative Renewal. As provided in 314 CMR 5.12(9), a permittee that has filed an application for administrative renewal of an individual permit and has received notice that the permittee has not met the conditions for administrative renewal shall, on or before the deadline established by the Department in said notice, submit a complete application for renewal in accordance with 314 CMR 5.12(11) and 314 CMR 5.12(12), unless otherwise directed by the Department in said notice.
- (11) If the permittee seeks to modify the treatment works, a complete application for permit renewal shall include the following:
 - (a) a report by a Massachusetts Registered Professional Engineer with a concentration in sanitary, civil or environmental engineering describing the proposed modification; and
 - (b) a certification by the Engineer that the treatment works with the proposed modification is designed to operate in compliance with all the terms and conditions of 314 CMR 5.00 and the permit including without limitation the effluent limitations set forth in 314 CMR 5.00.
- (12) If the permittee is not eligible for administrative renewal of the existing permit because of deficiencies in the design, construction, operation, or maintenance of the treatment works that may prevent the discharge from complying with all the terms and conditions of 314 CMR 5.00 and the permit, the application for permit renewal shall include a corrective action plan and schedule. The corrective action plan and schedule shall detail all changes needed to address, correct or prevent any violations during the next five years and include an implementation schedule. Changes set forth in the corrective action plan may include without limitation modifications to the treatment works authorized in the permit and/or changes to the approved Operation and Maintenance Plan.

5.13: General Permits

- (1) <u>Authority to Issue General Permits</u>. The Department may issue general permits that authorize one or more types of discharges and the construction, operation, and maintenance of associated treatment works by multiple dischargers, who have properly applied for and obtained coverage under the appropriate general permit. The Department may issue general permits to one or more categories or subcategories of dischargers whose discharges warrant similar control measures, because the Department has determined that they:
 - (a) involve the same or similar types of operations;
 - (b) discharge the same types of wastes;
 - (c) require the same effluent limitations or operating conditions;
 - (d) require the same or similar monitoring requirements; and
 - (e) are more appropriately controlled under a general permit than under individual permits.

Based on the factors in 314 CMR 5.13(1)(a) through (e), the Department may issue general permits for the construction, installation, modification, operation, and maintenance of certain PWTFs and POTWs that are designed to receive and receive less than 50,000 gallons per day of sewage. The Department may also issue general permits for additional discharges including, without limitation, the following:

- 1. reject water from reverse osmosis facilities;
- 2. boiler blowdown with chemical additives;
- 3. carwashes;
- 4. laundromats;
- 5. wastewater from water purification plants and water treatment plant lagoons; and
- 6. point source agricultural discharges.
- (2) The Department may limit the scope of a general permit to discharges within a particular geographic area. Likewise, the Department may exclude discharges in a specified geographic area from coverage under a general permit.
- (3) The Department may issue, modify or revoke a general permit in accordance with applicable provisions of 314 CMR 2.00 and 5.00. The Department may make a minor modification of a general permit without following the procedures set forth in 314 CMR 2.00 to correct typographical errors.
- (4) <u>Coverage under a General Permit</u>. Dischargers, who have previously obtained an individual permit and who seek to be covered by a general permit in *lieu* of an individual permit, and proposed dischargers, who seek to be covered by a general permit, shall submit to the Department a notice of intent requesting coverage under the general permit in accordance with the requirements of the appropriate general permit, 314 CMR 2.00 and 314 CMR 5.00. A discharger, who fails to submit a notice of intent in accordance with the terms of the general permit, 314 CMR 2.00 and 314 CMR 5.00, is not authorized to discharge under the general permit. In general, the filing of a complete and timely notice of intent fulfills the requirements for permit applications for purposes of 314 CMR 5.09A.
- (5) The Department will specify the contents of the notice of intent in the general permit and require the submission of the information deemed necessary by the Department for its adequate implementation and compliance oversight of the general permit including, at a minimum, the legal name and address of the owner or operator, the facility name and address, type of facility or discharge, and the location of the discharge.
- (6) The Department will specify in the general permit the deadlines for submitting notices of intent to be covered and the date(s) when a discharger is authorized to discharge under the general permit.
- (7) The Department will specify in the general permit whether a discharger that has submitted a complete and timely notice of intent, and is eligible for coverage under the general permit, is authorized to discharge in accordance with the general permit either upon the receipt of the notice of intent by the Department, after a waiting period specified in the general permit, on a date specified in the general permit, or upon receipt of notification by the Department.

- (8) The Department may require any person seeking coverage under a general permit, or authorized to discharge under a general permit, to apply for and obtain an individual permit or an alternative general permit. Circumstances in which the Department may require an individual permit or an alternative general permit include, but are not limited to, the following:
 - (a) The discharger is not in compliance with the terms and conditions of the general permit and/or has not met the eligibility requirements for coverage under the general permit.
 - (b) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the discharges covered by the general permit.
 - (c) More specific effluent limitations are established for discharges covered by the general permit.
 - (d) The Department, based on a Total Maximum Daily Load developed by the Department or otherwise, determines that:
 - 1. The discharger is not appropriately or adequately controlled under the general permit; or
 - 2. More stringent limits than those set forth in the general permit are necessary to protect the public health, safety, welfare or the environment, to achieve or maintain compliance with the Massachusetts Surface Water Quality Standards, or protect the ground water as an actual or potential source of potable water.
 - (e) The discharger covered by the general permit is a significant contributor of pollutants to waters of the Commonwealth based on the location and/or quantity of the discharge or type of pollutants discharged.
 - (f) The entity seeking coverage under the general permit has failed to provide sufficient information for the Department to determine that coverage under the general permit will adequately protect the public health, safety, welfare, and the environment.
 - (g) The Department determines that the treatment works authorized to discharge under the general permit:
 - 1. No longer involves the same or substantially similar types of operations as the permittees granted coverage under the general permit;
 - 2. No longer discharges the same types of wastes as the permittees granted coverage under the general permit;
 - 3. No longer requires the same effluent limitations or operating conditions as the permittees granted coverage under the general permit;
 - 4. No longer requires the same or similar monitoring as the permittees granted coverage under the general permit; or
 - 5. Is more appropriately controlled under an individual permit.
- (9) In *lieu* of requiring a discharger covered or seeking coverage under a general permit to obtain an individual permit, the Department may direct such discharger to undertake additional control measures, best management practices or other actions to ensure compliance with the general permit, achieve or maintain compliance with 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*, protect the use of the ground water as an actual or potential source of potable water, or protect the public health, safety, welfare, or the environment. The Department may also require the discharger to replace damaged monitoring wells, to install additional monitoring wells, to monitor for additional parameters or to perform more frequent monitoring if it determines that such requirements are necessary to protect the public health, safety, welfare, or the environment. The Department may exercise its authority to require the discharger to take the above actions by requiring the discharger to request coverage under an alternative general permit, by taking an enforcement action against the discharger, or by other means.

- (10) Where the Department requires a discharger covered or seeking coverage under a general permit to apply for an individual permit or request coverage under an alternative general permit, the Department shall notify the permittee in writing that an individual permit or alternative general permit application is required as applicable. The Department's notification will include a brief statement of the reasons for the Department's action, the applicable form, a statement setting a deadline for the permittee to file the application for an individual permit or submit the notice of intent requesting coverage under the alternative general permit, and a statement that on the effective date of issuance or denial of the individual permit or alternative general permit as it applies to the particular permittee, coverage under the general permit shall automatically cease. The Department may grant additional time to submit the application or notice of intent upon request of the applicant. If a permittee fails to submit an individual permit application or a notice of intent requesting coverage under a general permit within the deadline set forth in its notification, the effectiveness of the general permit as applied to the discharger may be terminated as follows:
 - (a) For a permittee seeking renewal of coverage under a general permit the effectiveness of the general permit as applied to the discharger is automatically terminated at the end of general permit term
 - (b) To terminate coverage prior to the end of the permit term, the Department may revoke the general permit coverage in accordance with 314 CMR 2.10.
- (11) At least 180 days prior to the expiration of a general permit, a permittee covered by a general permit shall file a notice of intent requesting continued coverage under the general permit, or file an application for an individual permit. If the facility is a POTW or a PWTF that discharges effluent as the result of the treatment of sewage only that has been in operation for 14 years or more, the Department may require the permittee to submit an engineering report that meets the requirements of 314 CMR 5.12(7) at least 180 days prior to the expiration of the permit so that the Department may determine whether the discharge may be adequately controlled under the general permit or whether an individual permit or alternative general permit is required.
- (12) Continuation of an Expired General Permit. In the event that the Department does not reissue a general permit prior to its expiration date, the general permit will be administratively continued and remain in full force and effect as to any particular permittee as follows. The Department may grant coverage under the general permit to any person who submitted a notice of intent requesting coverage under the general permit prior to the expiration date of the permit. The Department may also grant coverage under a general permit to a person who submitted a notice of intent after the expiration of the permit while the permit is administratively continued provided said person meets all other terms and conditions of the permit. Any permittee who was granted coverage prior to the expiration date or as provided in 314 CMR 5.13(12) will automatically remain covered by the continued permit until the earlier of:
 - (a) Reissuance of the general permit at which time the permittee shall comply with the conditions of the new permit to maintain its authorization to discharge;
 - (b) The permittee's submittal of a written notice of termination of general permit coverage to the Department;
 - (c) The Department's issuance of an individual permit or an alternative general permit for the permittee's discharge; or
 - (d) A formal permit decision by the Department not to reissue the general permit, at which time, the permittee shall seek coverage under an alternative general permit or apply for an individual permit.
- (13) Any person who has been granted coverage under a general permit who thereafter seeks to use, sell, distribute or offer for use, sale, or distribution some or all of the effluent from the covered facility as reclaimed water in accordance with 314 CMR 20.00 shall apply for an individual permit at least 180 days prior to the date that the use, sale, distribution or offering for sale, use or distribution of the effluent as reclaimed water is proposed to commence. The Department will not authorize the use, sale or distribution of the effluent from a treatment works as reclaimed water under a general permit.
- (14) The provisions of 314 CMR 5.13 take effect on March 20, 2009.

5.14: Signatories to Permit Applications, Notices of Intent and Reports

- (1) <u>Applications</u>. All permit applications for an individual permit and all notices of intent requesting coverage under a general permit, including without limitation, applications for PWTFs submitted in accordance with 314 CMR 5.15 shall be signed as follows:
 - (a) For a corporation or limited liability corporation: by a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function and duly authorized by the Board of Directors, or any other person who performs similar policy or decision-making functions for the corporation, or to whom authority to sign documents has been assigned or delegated in accordance with corporate procedures;
 - (b) For a partnership or limited partnership: by a general partner;
 - (c) For a sole proprietorship: by the proprietor;
 - (d) For a trust: by the trustee;
 - (e) For a municipality, local government unit or political subdivision of the State or Federal government: by a principal executive officer, ranking elected official, or other person with legal authority to sign such documents.
- (2) <u>Reports</u>. All reports or other information required by permits or 314 CMR 5.00 and other information requested by the Department shall be signed by a person described in 314 CMR 5.14(1), or by a duly authorized representative of that person. A person is a duly authorized representative only if
 - (a) The authorization is made in writing by a person described in 314 CMR 5.14(1);
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, or position of equivalent responsibility; and
 - (c) The written authorization is submitted to the Department.
- (3) <u>Certification</u>. Any person signing a document under 314 CMR 5.14(1) or (2) shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my diligent inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

5.15: Requirements for Privately Owned Wastewater Treatment Facilities

- (1) A person who owns, operates or proposes to own or operate a Privately Owned Wastewater Treatment Facility (PWTF) is eligible for an individual or general permit under 314 CMR 5.00 to construct, install, modify, operate and maintain a PWTF provided that the applicant submits with the permit application for an individual permit or notice of intent requesting coverage under a general permit sufficient information to demonstrate to the Department's satisfaction that:
 - (a) A single entity (the single responsible entity) will be the permittee responsible for the operation of the facility, including reporting, monitoring, maintenance, repair and replacement of the PWTF;
 - (b) Except as otherwise provided in 314 CMR 5.12(5), the single responsible entity will not change its organizational arrangements, nor sell, assign, or transfer the PWTF without the prior written approval of the Department; and
 - (c) The single responsible entity owns or controls the land on which the PWTF is located, and owns or controls land or has easements that provide access to:
 - 1. the land on which the PWTF is located;
 - 2. the wastewater collection system; and
 - 3. the land ten feet on each side of the collection system.
- (2) If the privately owned wastewater treatment facility treats wastewater generated by activities that are owned or controlled by persons other than the single responsible entity, the applicant shall also demonstrate that:

- (a) All stakeholders share the financial and operational responsibilities for the PWTF required by 314 CMR 5.00; and
- (b) The single responsible entity has the authority to institute a user charge system sufficient to generate adequate revenue and to enforce such assessments against users in a manner equivalent to a municipal fee, tax or betterment assessment.

For purpose of 314 CMR 5.15(2), the term stakeholders shall include the persons who own or control or will own or control any activities that result in the discharge of pollutants. If the PWTF treats sewage so that it may be used as reclaimed water in accordance with 314 CMR 20.00, the term stakeholder may also include any persons who own or control the activities that are involved in the use, sale, distribution, or offering for use, sale or distribution of the effluent from the PWTF as reclaimed water in accordance with 314 CMR 20.00.

If the PWTF treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities and/or assisted living facilities, the obligation of all stakeholders to share in the financial and operational responsibilities for the PWTF shall include, without limitation, the obligation to establish and maintain a financial assurance mechanism that provides for an immediate repair and replacement account and a capital reserve account. Notwithstanding the foregoing, persons who agree to have their wastewater treated at a PWTF instead of an on-site subsurface sewage disposal system permitted by 310 CMR 15.000 as part of a plan to mitigate the environmental impacts of the PWTF and/or to ensure that the effluent from the PWTF will not cause or contribute to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* are not stakeholders as defined in 314 CMR 5.15(2). Such persons are not required to share all the financial and operational responsibilities for the PWTF including, if applicable, the obligation to establish and maintain financial assurance mechanisms that provide for an immediate repair and replacement account and capital reserve account.

- (3) If the PWTF does not treat any sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities and/or assisted living facilities, and is not required to establish a financial assurance mechanism pursuant to 314 CMR 5.15(6), the applicant may, in lieu of making the demonstration required by 314 CMR 5.15(1), identify all persons who own, control or have a substantial interest in the treatment works, an activity resulting in the discharge of pollutants, and the land on which the treatment works is located. In that event, the Department may require that any party who owns or controls the treatment works, an activity resulting in the discharge of pollutants, or the land on which the treatment works is located, shall be a permittee who is jointly and severally responsible for the operation of the treatment works in compliance with the permit, if the Department determines that including said person as a permittee is a necessary or appropriate means of protecting the public health, safety, welfare, or the environment, and/or ensuring that the treatment works and the discharge complies with the permit or 314 CMR 5.00.
- (4) A permittee responsible for the operation of a PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities shall establish and maintain financial assurance mechanisms to insure the Department that the permittee is capable of operating the facility in accordance with 314 CMR 5.00 and the permit. The permittee shall meet this obligation by completing the appropriate Department-approved form documents to establish the financial assurance mechanisms and shall file with the Department and maintain the current Department-approved form documents constituting or evidencing compliance with this obligation. The Department shall not authorize the permittee to operate a PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities, and the permittee shall not operate said facility, unless and until the Department has approved all required financial assurance mechanisms, the required financial assurance mechanisms are in full force and effect, and the permittee has made all financial contributions required by the financial assurance mechanisms. The permittee shall perform all its obligations under the required financial assurance mechanisms approved by the Department.

- (5) A permittee responsible for the operation of a PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities and/or assisted living facilities shall establish and maintain a financial assurance mechanism in the form of an escrow agreement developed by the Department for such purpose that provides for an immediate repair and replacement account in accordance with 314 CMR 5.15(5)(a). The permittee shall also establish and maintain a financial assurance mechanism in the form of a trust agreement developed by the Department for such purpose that provides for a capital reserve account in accordance with 314 CMR 5.15(5)(b).
 - (a) Immediate Repair and Replacement Account. The immediate repair and replacement account shall contain adequate funds to correct any unanticipated problem immediately so that any disruption of operation is minimized, and a violation of the terms and conditions contained in the permit does not occur. At least 30 days prior to commencing operation of a new PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities, the permittee shall place in the immediate repair and replacement account an amount equal to at least 15% of the estimated construction cost of the PWTF. At least 30 days prior to renewal or transfer of a permit for an existing PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities, sufficient funds shall be placed in the immediate repair and replacement account so that the total amount in the account equals at least 15% of the estimated construction cost of the PWTF. All permitees responsible for the operation of a PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities shall keep an amount equal to at least 15% of the estimated construction cost of the PWTF in the immediate repair and replacement account and shall replenish the account within 90 days of any disbursement.
 - (b) Capital Reserve Account. Within 20 years from the date a PWTF that treats at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities commences operation, the permittee shall accumulate in the capital reserve account sufficient funds to replace the PWTF or portions thereof and all other mechanical equipment associated with wastewater treatment and collection but not including land, grounds or disposal area. The permittee shall meet this requirement by accumulating in the capital reserve account an amount that is at least equal to 25% of the estimated construction cost on or before the date 20 years from the date the PWTF commences operation. The Department-approved form establishing the financial assurance mechanism shall set out a schedule for accumulating the required amount in the capital reserve account. The permittee shall deposit the amount required to be accumulated in the capital reserve account as provided in 314 CMR 5.15(5)(b) in accordance with the schedule set forth in the Department-approved form establishing the financial assurance mechanism. For permittees with treatment facilities that have been in operation for more than 15 years, the Department may require the permittee to accumulate in the capital reserve account funds in addition to 25% of the estimated construction cost of the PWTF if the Department determines that, based on its age and condition, additional funds are necessary to ensure the PWTF can continue to operate in a manner that adequately protects the public health, safety, welfare, or the environment. For such permittees, the Department will establish a schedule for the accumulation of capital in the capital reserve account based on the age and condition of the PWTF. This schedule shall be incorporated into the Department-approved form document establishing the financial assurance mechanism.
 - (c) For purposes of both the immediate repair and replacement account and the capital reserve account, the estimated construction cost of the wastewater treatment facility shall include the cost of constructing the wastewater treatment plant, the collection system and all mechanical equipment associated with the wastewater treatment plant and collection system. The estimated construction cost shall not include the cost of the land, grounds or the disposal area.

5.15: continued

(6) The Department may require a PWTF that does not treat any sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities to establish and maintain a financial assurance mechanism that provides for an immediate repair and replacement account and/or a capital reserve account in accordance with 314 CMR 5.15(4) and (5) if, at the time of permit renewal or any other time, the Department determines that establishment and maintenance of a financial assurance mechanism is necessary to ensure that the PWTF operates in compliance with its permit, and/or 314 CMR 5.00, and/or to protect the public health, safety, welfare or the environment. In making this determination, the Department shallconsider the compliance history of the PWTF, the risk the PWTF poses to the public health, safety, welfare, or the environment including without limitation actual and potential sources of potable water for public water systems, private water supply wells, and downgradient hydrologically connected surface waters.

5.16: General Conditions

The following conditions apply to all individual and general permits:

- (1) No discharge authorized in the permit shall cause or contribute to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*. Upon promulgation of any amended standard, this permit may be revised or amended in accordance with such standard and 314 CMR 2.10 and 3.13 or 5.12. Except as otherwise provided in 314 CMR 5.10(3)(c), 310 CMR 5.10(4)(a)2. and 314 CMR 5.10(9), no discharge authorized in the permit shall impair the ability of the ground water to act as an actual or potential source of potable water. Evidence that a discharge impairs the ability of the ground water to act as an actual or potential source of potable water includes, without limitation, analysis of samples taken in a downgradient well that shows one or more exceedances of the applicable water quality based effluent limitations set forth in 314 CMR 5.10. In those cases where it is shown that a measured parameter exceeds the applicable water quality based effluent limitations set forth in 314 CMR 5.10 at the upgradient monitoring well, evidence that a discharge impairs the ability of the ground water to act as an actual or potential source of potable water is deemed to exist if a measured parameter in any downgradient well exceeds the level of that same measured parameter in the upgradient well for the same sampling period. A statistical procedure approved by the Department shall be used in determining when a measured parameter exceeds the allowable level.
- (2) <u>Duty to Comply</u>. The permittee shall comply at all times with the terms and conditions of the permit, 314 CMR 5.00, M.G.L. c. 21, §§ 26 through 53.
- (3) <u>Standards and Prohibitions for Toxic Pollutants</u>. The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Federal Act, 33 U.S.C § 1317(a), for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (4) <u>Proper Operation and Maintenance</u>. The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to achieve compliance with the terms and conditions of the permit, and the regulations promulgated at 314 CMR 12.00: *Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Discharges*, and 257 CMR 2.00: *Certification of Operators of Wastewater Treatment Facilities*.
- (5) <u>Duty to Halt or Reduce Activity</u>. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored or an alternative method of treatment is provided. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- (6) <u>Power Failure</u>. In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- (a) provide an alternative power source sufficient to operate the wastewater control facilities; or
- (b) halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.
- (7) <u>Duty to Mitigate</u>. The permittee shall take all reasonable steps to minimize or prevent any adverse impact on human health or the environment resulting from non-compliance with the permit.
- (8) <u>Duty to Provide Information</u>. The permittee shall furnish to the Department within a reasonable time as specified by the Department any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine whether the permittee is complying with the terms and conditions of the permit.
- (9) <u>Inspection and Entry</u>. The permittee shall allow the Department or its authorized representatives to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records required by the permit are kept;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - (c) Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit; and
 - (d) Sample or monitor at reasonable times for the purpose of determining compliance with the terms and conditions of the permit.
- (9A) The permittee shall physically secure the treatment works and monitoring wells and limit access to the treatment works and monitoring wells to those personnel required to operate, inspect and maintain the treatment works and to collect samples.
- (9B) The permittee shall identify each monitoring well by permanently affixing to the steel protective casing of the well a tag with the identification number listed in the permit.
- (10) <u>Monitoring</u>. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other test procedures are specified in the permit.
- (11) Recordkeeping. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and all records of all data used to complete the application for the permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The individual(s) who performed the sampling or measurement;
 - (c) The date(s) analyses were performed;
 - (d) The individual(s) who performed the analyses;
 - (e) The analytical techniques or methods used; and
 - (f) The results of such analyses.
- (12) <u>Prohibition of Bypassing</u>. Except as provided in 314 CMR 5.16(13), bypassing is prohibited, and the Department may take enforcement action against a permittee for bypassing unless:
 - (a) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

5.16: continued

- (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- (c) The permittee submitted notice of the bypass to the Department:
 - 1. In the event of an anticipated bypass, at least ten days in advance, if possible; or
 - 2. In the event of an unanticipated bypass, as soon as the permittee has knowledge of the bypass and no later than 24 hours after its first occurrence.
- (13) <u>Bypass not Exceeding Limitations</u>. The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if necessary for the performance of essential maintenance or to assure efficient operation of treatment facilities.
- (14) <u>Permit Actions</u>. The permit may be modified, suspended, or revoked for cause. The filing of a request by the permittee for a permit modification, reissuance, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition.
- (15) <u>Duty to Reapply</u>. If the permittee wishes to continue an activity regulated by the permit after the expiration date of the permit, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department in writing.
- (16) <u>Property Rights</u>. The permit does not convey any property rights of any sort or any exclusive privilege.
- (17) Other Laws. The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, and local laws and regulations.
- (18) Oil and Hazardous Substance Liability. Nothing in the permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Federal Act, 33 U.S.C. § 1321, and M.G.L. c. 21E.
- (19) Removed Substances. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed in a manner consistent with applicable Federal and State laws and regulations including, but not limited to, the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53 and the Federal Act, 33 U.S.C. § 1251 *et seq.*, the Massachusetts Hazardous Waste Management Act, M.G.L. c. 21C, and the Federal Resource Conservation and Recovery Act, 42 U.S.C. § 6901, *et seq.*, 310 CMR 19.000 and 30.000.

(20) Reporting Requirements.

- (a) <u>Monitoring Reports</u>. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) at the intervals specified elsewhere in the permit. If the permittee monitors any pollutant more frequently than required by the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- (b) <u>Compliance Schedules</u>. Reports of compliance or non-compliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date.
- (c) <u>Planned Changes</u>. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility or activity which could significantly change the nature or increase the quantity of pollutants discharged. Unless and until the permit is modified, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.
- (d) <u>Anticipated Non-compliance</u>. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in non-compliance with permit requirements.

- (e) <u>24 Hour Reporting</u>. The permittee shall report any non-compliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance. The following shall be included as information which must be reported within 24 hours:
 - 1. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - 2. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.
- (f) Other Non-compliance. The permittee shall report all instances of non-compliance not reported under 314 CMR 5.16(20)(a), (b), or (e) at the time monitoring reports are submitted. The reports shall contain the information listed in 314 CMR 5.16(20)(e).
- (g) <u>Toxics</u>. All manufacturing, commercial, mining, or silvicultural dischargers must notify the Department as soon as they know or have reason to believe:
 - 1. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant listed in 314 CMR 3.17 which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - a. 100 micrograms per liter (100 ug/l);
 - b. 200 micrograms per liter (200 ug/l) for acrolein and acrylonitrile; 500 micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - c. Five times the maximum concentration value reported for that pollutant in the permit application; or
 - 2. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- (h) <u>Indirect Dischargers</u>. All Publicly Owned Treatment Works shall provide adequate notice to the Department of the following:
 - 1. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to § 301 or 306 of the Federal Act, 33 U.S.C. § 1311 or 1316, if it were directly discharging those pollutants; and
 - 2. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- (i) <u>Information</u>. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
- (21) <u>Signatory Requirement</u>. All applications, reports, or information submitted to the Department shall be signed and certified in accordance with 314 CMR 3.15 and 5.14.
- (22) <u>Severability</u>. The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.
- (23) Reopener Clause. The Department reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53 or the Federal Act, 33 U.S.C. § 1251 *et seq.*, in order to bring all discharges into compliance.
- (24) <u>Approval of Treatment Works</u>. All discharges and associated treatment works authorized herein shall be consistent with the terms and conditions of this permit. Any modification to the approved treatment works shall require written approval of the Department prior to the construction of the modification.

5.16: continued

(25) Transfer of Permits.

- (a) <u>RCRA Facilities</u>. Any permit which authorizes the operation of a RCRA facility which is subject to the requirements of 314 CMR 8.07 shall be valid only for the person to whom it is issued and may not be transferred.
- (b) <u>Transfers by Modification</u>. Except as provided in 314 CMR 5.16(25)(a) and (c), a permit may be transferred by the permittee to a new owner or operator provided that the permit has been modified or revoked and reissued or a minor modification is made to identify the new permittee in accordance with 314 CMR 5.12(3) and (4).
- (c) <u>Automatic Transfers</u>. For facilities other than Privately Owned Wastewater Treatment Facilities (PWTFs) that treat at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities, PWTFs that have been required to establish financial assurance mechanism(s) pursuant to 314 CMR 5.15(6), and RCRA facilities subject to the requirements of 314 CMR 8.07, a permit may be automatically transferred in accordance with 314 CMR 5.12(5).
- (26) Permit Compliance Fees and Inspection Information. Except as otherwise provided, any permittee required to obtain a surface water or ground water discharge permit pursuant to M.G.L. c. 21, § 43 and 314 CMR 3.00 and 5.00, shall be required to submit the annual compliance assurance fee established in accordance with M.G.L. c. 21A, § 18 and 310 CMR 4.00 as provided in 314 CMR 2.12. The requirement to submit the annual compliance fee does not apply to any local government unit other than an authority. Any permittee required to obtain a surface water or ground water discharge permit pursuant to M.G.L. c. 21, § 43 and 314 CMR 3.00 and 5.00 may be required to submit inspection information annually as a condition of the permit as provided in 314 CMR 2.12.

REGULATORY AUTHORITY

314 CMR 5.00: M.G.L. c. 21, §§ 26 through 53.

NON-TEXT PAGE